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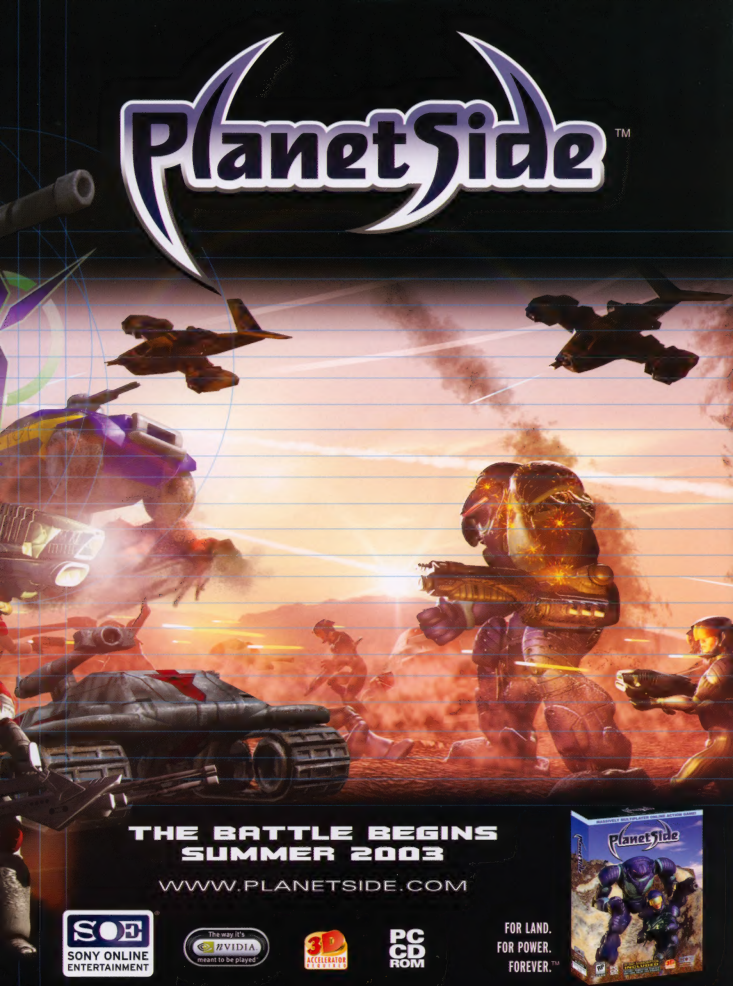

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contents

Thief 3 and Deus Ex: Invisible War p 56

Full Canvas Jacket p 32

Half-Life 2 p 38

Rainbow Six 3: Raven Shield p 74

featured

26 Conventions Spring Eternal
The industry explores itself in conferences and awards.
By Robert de los Reyes, Esq.

32 Back to the Future
Full Canvas Jacket promises to turn into a contender for Sim of the Year.
By Jeff Lackey

38 Shock and Awe
After five years of virtual silence, Valve finally unveils the sequel to Half-Life.
By Steve Bauman

56 Shadows and Fog
Deus Ex: Invisible War and Thief 3 are all about player choice and the highest-resolution darkness money can buy. Plus "How We Got Thief," an "interesting" timeline, and an interview with Warren "I'm so humble I refuse to take any credit for all the amazing games I've worked on, yet I'm that one consistent element between them" Spector. By Kelly Wand

68 Listen Up!
Do you take in-game sound for granted? Maybe you shouldn't. The past horrors, current hassles, and future technology of game audio. By Chris Kramer

74 Downing Tangos Since 1998
Into the fray with Tom Clancy's Rainbow Six 3: Raven Shield. By Tom Chick

contents

departments

20 Rebound and Q&A
34 Mods & Ends

incoming

42 Savage
43 Etherlords II
46 Jedi Knight: Jedi Academy
48 Homeworld 2
49 Halo
50 Black & White 2
51 Grand Theft Auto: Vice City
52 Republic: The Revolution
53 Chrome
54 Battlefield 1942: Secret Weapons of WWII

opinion

74 Rainbow Six 3: Raven Shield
76 IL2: Forgotten Battles
78 Galactic Civilizations
80 Devastation
81 Jurassic Park: Operation Genesis
82 IGI-2: Covert Strike
84 American Conquest
85 Harbinger
85 Tournament Dreams College Basketball
86 1503AD: The New World
87 High Heat 2004
87 Heroes IV: The Windows of War
87 Samurai
87 Chemicus
88 GeForce FX 5600 Ultra
88 GeForce FX 5200 Ultra
89 Radeon 9800 Pro
90 Dell XPS
91 Zboard
91 X-Arcade

insider

17 Upfront
92 Applied Game Theory
93 Road to Nowhere
94 View from the Middle
96 Out of the Box
98 Technicalities
100 Three Finger Salute

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Emergent Emergence

If you build systems, they will come

by steve bauman

IT SEEMS LIKE every year at the Game Developer's Conference, which took place in San Jose in March, there's some new technology or buzzword making the rounds. This year it seemed like the "buzzword du jour" was "emergent gameplay," the notion that games should be less predetermined and merely feature a set of rules governing its elements. When you throw a bunch of agents in the mix, whether they're AI or humans, different things occur based on the rules and what sort of interaction takes place. The success of *Grand Theft Auto III* is helping fuel the re-emergence, pun intended, of this style of gameplay.

I remember this topic coming up when talking with Doug Church of Looking Glass in 1994, when I was doing a cover story on *Terra Nova*. He described a scene in *Ultima Underworld* (which he served as a programmer on before moving on to work on the design for its sequel) where he was walking through a hall in the enormous abyss and was attacked by some creatures. At the end of the hallway was a chasm, and while he could drop down into a river a few levels down and survive, he didn't want to have to make his way back to this location. Since his character was low on health, he tried to pick a lock to enter a room in order to lose his pursuers. As the creatures lobbed fireballs at him, he opened the door and found the other room filled to the brim with some other creatures. Realizing it was futile, he turned tail, ran down the hall, and jumped off the ledge, sending him multiple levels down the abyss and into a river.

While the game featured a fixed environment, none of this activity was pre-determined, or "scripted" as people like to call it today. The interaction came as a result of everything in the world being given a general set of instructions and reacting to each other and the what the player is doing. In those days, it wasn't very sophisticated, though the results were anything but; however, it was probably more elaborate than a game like the incredibly scripted *Medal of Honor: Allied Assault*. On the plus side, Electronic Arts and developer 2015 were able to create an incredibly cinematic and compelling experience from start to finish. They could handle the pacing and the plotting, and while the player ultimately had some control over how you fight individual battles, the game feels like it's on rails. In fact, despite being the technological leaders, a surprising number of shooters feature the least amount of emergent gameplay. It's actually a selling point when you tell people that everything is "scripted" to occur in certain ways after certain events. Games often use those scenes as rewards for the player, but the downside is that everyone's experience is virtually identical and replayability is minimal, much like the much maligned adventure game genre. (On the role-playing front, you have extreme emergent games like *Underworld* compared to a *Final Fantasy*.)

Strategy games, particularly those from Will Wright and Peter Molyneux, have always emphasized this type of behavior. Any "sim" style game features a set of rules, and the easier it is to manipulate those rules and let the player dictate how he or she goes about things, the better the experience. The enhanced "realism" of *SimCity 4* arguably forces you to replace some of the free-form building of previous *SimCity* games with a more rigid structure, making it feel more like a linear, non-emergent experience. The brilliance of *Black & White* was in having the world be emergent, reflecting the player's style. Oddly enough, its general failure as a game had more to do with an overall lack of structure.

> **"***When you put the game's fate in the hands of the player, letting him or her control all of the elements typically handled by a designer or writer, you end up with a wildly variable game experience.***"**

Therein lies the challenge. Emergent gameplay, when applied to systems, physics, or conversations, can produce the most compelling game experiences imaginable, or they can produce seriously boring ones. When you put the game's fate in the hands of the player, letting him or her control all of the elements typically handled by a designer or writer, you end up with a wildly variable game experience.

Games are about giving players interesting decisions and choices in compelling worlds. The more they can leave the option of "what's next?" up to the player, the better off the game experiences will be, even if yours doesn't quite match mine.

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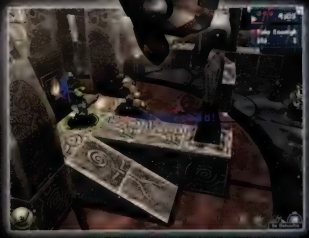

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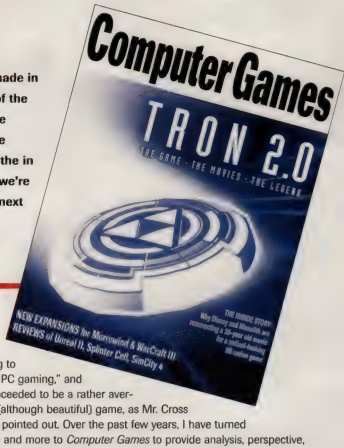
You like us, you really like us. Or at least you like the changes made in the April issue. A few people had issues with certain elements of the design, such as the too-small game names in reviews, and we've addressed them with this issue. But for the most part, people are ecstatic over the restatement of our editorial focus and tone. Bathe in the warm glow of our reader's love, ah, can't you feel it… okay, we're getting a bit queasy here too, but we're fairly certain that when next month rolls around, people will surely be angry over something else Tom Chick yammers on about. As always, send all letters to *rebound@cgonline.com*.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THE INSIDE STORY:
NEW EXPANSIONS for Morrowind & WarCraft III
REVIEWS of Unreal II, Splinter Cell, SimCity 4

April Huzzahs

When I saw the subtitle of your Upfront editorial this month: "The world of gaming is changing: it's time for us to change as well," I got this sinking feeling. Here we go again, things are going to be different. You have to go with the flow. The stuff you like now isn't how it's going to be so deal with it or forget it, etc., etc.

But that's not what you meant. Man, reading that was like a breath of fresh air. You're going to actually write an adult magazine (adult in the real sense meaning mature). While I don't mind a bit of pandering now and then, the level of computer gaming magazines has been atrocious. I grew up in the beginning of the microcomputer development. I remember when Creative Computing was an amateur pub which grew into an excellent general computer publication (who even remembers it today?). I remember when *Computer Gaming World* was a serious, useful magazine, not the childish "what can I get away with" drivel it is now. I used to get *PC Gamer*, but finally couldn't take the number of unnecessary scatological references any more.

The void is there. You've been closest to filling it (though still with the gratuitous language or references now and then) which is why I'm still a subscriber. Now I'm definitely with you.

Good luck on your "new" direction. Hopefully, reasoned, mature articles and reviews will be appreciated by others as much as they will be by me and my friends.

Greg Courter

Congratulations to you and the staff for another great issue. Jason Cross did a superb job as always, with a spot-on Unreal review that gives a fair look at the strengths and weaknesses of that game. The article on *TRON 2.0* was well-done, and I applaud your continuing effort to provide "context" for the game itself, using the sidebar articles on Syd Mead and the original movie. Well, I could go on and on, but the real reason I'm writing is because of your very first page… the Editorial.

Huzzahs!

I am delighted that *Computer Games* is taking the direction you have laid out. I am exactly that demographic that has felt increasingly left out of the existing market of computer game magazines. I have grown increasingly dismayed as one magazine after another has become exactly what you described, breathless fanboys who are more and more immature, offering up quotables for box covers, and spending far too much ink detailing their dating lives. *Computer Gaming World* in particular lost it for me after they said "*Unreal II* is going to save PC gaming," and it proceeded to be a rather average (although beautiful) game, as Mr. Cross aptly pointed out. Over the past few years, I have turned more and more to *Computer Games* to provide analysis, perspective, and thought-provoking debate. The Tolkien issue [January], with the debate on *D&D's* influence, was a particularly "meaty" issue, with exactly the kind of discussion that I love to read.

Given all of this, I think your editorial is the single most heartening page I've read in the past year on computer gaming. Along with this letter, I am therefore sending in my first annual subscription, because I want to help support your effort to create the "alternative" magazine for my demographic. Keep up the great work, and I'm looking forward to where the magazine evolves over the coming months.

Chris Johnson

I am writing this note in appreciation of the new direction your magazine has decided upon, focusing at long last in the direction of the adult gaming community. It really takes guts to depart the kindergarten club of other computer gaming magazines, and commit to a more mature direction in the industry. It is you, your editorial staff, and your magazine that is taking our beloved pastime into the future, and growing it away from childhood.

Computer gaming goes back a long ways now, and those folks who were playing games way back in the day are only even more hopelessly addicted today. My shelves no longer have room for to display all the games I've collected over the years, and many of my friends and coworkers have the same "problem" going for them too. It's about time that somebody woke up and realized that, and thank you for being among the first.

Your new look will go a long ways towards securing respect among us, and that ultimately translates into a dedicated readership over the long run. You've given us a long needed break from having to wade through the fluff and hype and dude-speak that impresses the easily impressionable.

I've been reading gaming magazines for nearly as long as they've been available, and your editorial was the first to inspire

me to sit down and actually write something in response. For whatever that's worth, thank you!

Gary Kressner

I just received your April 2003 issue and I must say that I thoroughly enjoyed Steve Bauman's editorial concerning the rapid decline in video game publication maturity. I appreciate your continued willingness to appeal to a more adult audience. I love the new layout for the magazine, as it looks much more professional.

As much humor as I'm able to find in your jokes towards fifteen-year-old boys, I am somewhat disappointed in your intolerance for that particular age group. I am sixteen (couldn't tell, could you?) and I still prefer Herbie Hancock and Miles Davis over Mudvayne and Avril Lavigne. I would rather watch the film *Pi* than *American Pie*. And yes, in most cases I would prefer to play computer games with a girl rather than stare at her breasts.

While I realize that most stereotypes have evolved from some sort of factual evidence (after all, without gender stereotypes men and women would have almost no identity), let's just remember that Maxim is a man's magazine, not a boy's magazine. What does this tell us?

Keep up the good work!

Chris Egner

I read a few of the other game magazines in order to get multiple viewpoints on games I might purchase, but have found lately that I often skip right past a great deal of their other content. I'd really like to express my appreciation for the decision to direct your magazine at the more mature audience that buys a significant chunk of the games that are sold. You're raising the bar for serious coverage of the computer gaming industry, and you've cemented me as a subscriber for as long as you'll stay the course.

Craig Deaton

STEELHEADED BATTALION

When I was leafing through your magazine and first saw this ad, I thought it was some kind of a parody. The second time around, I still couldn't believe it was real. After I went to the website and saw that it is actually a real "game," I just had to write to you.

It boggles the mind that someone would think up and actually produce this "game" and then make hardware for it. Please write at least a page long review of this atrocity. You'll have a fun time writing it and we'll have a fun time reading it.

Artur Ruzin

In reading the editorial on your changes this past issue, sign me up as one reader who's sick. Sick of magazine staffs' dating habits, horniness, and fast food preferences. Sick of masturbatory "we're awsum, d00dz" claptrap. Sick of a constant effluvium of hype. Sick of Canada-bashing as a spectator sport, eh.

All I want from a gaming magazine is to read about games and the issues that surround them, written by a staff with diverse interests in gaming and the experience to ford electronic rivers of steaming crap so that I don't have to do so. If the writer can be witty while being informative, better still.

I currently take three major gaming magazines. I have plans to pare that by one in the next year. You have just made that decision much easier, for you have ensured that it will not be yours that I drop.

Jonathan Kelley

I picked up your magazine for the first time in a while (the *TRON* edition) and was totally impressed. Being a more "mature" gamer, having been playing for more than twenty years, it was good to really have something to sink my teeth into as far as overall content, which is a nice change from the competition's more juvenile approach. I feel that this magazine is geared towards my interests in gaming and makes a nice companion to the info I get online. You've got yourself a regular reader now!

Warren Deegan

You guys hit the nail on the head with the direction you've chosen to take magazine. I've read *Computer Games* for years for the simple reason that it is the only magazine devoid of shameful corporate plugs and the only one with articles that actually look at the serious side of gaming. While male teenagers may like goggling at women and lewd humor, they also want writers that aren't afraid to say that a game from a big publisher sucks. Different target audiences may dictate a different approach, but the axiom of "keeping it real" in one's reviews is what keeps a publication loved by its respective fans.

Scott Strickland

Thank you, thank you, thank you. I finally have a computer gaming magazine to read that is not targeted at or written by self-absorbed, pubescent boys. I finally have a gaming magazine that is intelligently written, informative and that doesn't make me wade through toilet jokes, in-your-face attitude or pathetic sexual innuendos to get to the content that I'm looking for.

I was on the verge of canceling all three of my computer magazine subscriptions. Now I only have to cancel two.

Dan Silvia

The Remake Risk

As a founding member of Project Xenocide, in your article referred to as the "X-COM Remake," and speaking on behalf of the Xenocide Team, I would like to thank you for considering our project as one of the most promising remakes in the works. However, I would like to point out some misunderstandings I found as I was reading your article.

The project's official name changed about two months ago and,

as you may have noted, is now called *Xenocide* to avoid any relation to *X-COM*. One week ago, we registered our own domain, projectxenocide.com, and published our home page in space donated by the owner of www.xcomufo.com.

We, along with most of the other fans remaking yesterday's games just for fun, want to avoid legal problems, especially with the owners of the masterpieces we all love. In fact, before the article was published, we sent an email to Infogrames asking them to direct us to whoever is in charge of granting or denying permission to use the *X-COM* brand name. It was not our intention to release the game to the public without the IP owners' approval. Perhaps the fact that we are an Open Source project would have led people to believe that we don't care about the legal issues involved. Let me assure you that we do care.

We would like to thank you because you have highlighted some important issues that fans should know about when attempting to start a remake project of their own.

Federico Lois
Xenocide Founding Member

The changes noted in this letter occurred after the article was already off to the printers. –ed

Independent's Day

Just wanted to say that with your coverage of smaller independent game studios, you now have a life-long subscriber in myself. I've found that many of my most enjoyable games are those created by little known developers who aren't big-budget like EA and it's conglomerate. In particular, I recently enjoyed your coverage of the Indie Games Festival.

So I want to say thank you. Because your magazine could be the salvation of PC gaming as you hold the hope for small-budget games, who can access big-budget markets. Please continue this dedication, and I will subscribe every single year, and I will attempt to get my friends and family to subscribe as well.

Jeff Pinard

All about Schadenfreude

I'd like to be one of the first to give a thumbnail review of three new releases by Schadenfreude Interactive (SFI): *Age of Ornithology*, *Nazgul Thunder 2003*, and *Steelhead Battalion*. All were released on February 30, ahead of schedule. Because of game play balance issues, *Cthulhu Karts* was delayed. Rumor has it that the new release date is April 31. We'll see. [*When asked about the release date, its developer said, "It'll be DONE when the Elder Gods SAY it's done." –ed*]

The first game is *Age of Ornithology*. Another *Age* game. Oh joy. It does look good, with a lot of detail, all the way down to the pinion feathers. Sadly, that's the last thing that went right with this game. To describe the gameplay as fowl is actually a compliment. It is downright boring! Hatching eggs takes one hour of actual play time for every week of incubation time. The player has to constantly monitor the nest temperature, and this can be challenging in the different environments provided. The key to the entire game is statue building. These serve as waypoints and healing areas. Control the statuary, control the world. But the controls are not clearly implemented, they are very flighty. Sound is also pretty much random birdcalls with The Tennessee Birdwalk play-

Q&A questions & answers

There's been a lot of talk lately about which video cards support what features from DirectX 9. It's sort of hard to separate fact from the marketing hype. If you're confused about it, or anything else technology related, send mail to *qa@cgonline.com.*

Q: Since the new video cards support 8X AGP, I thought I would get a motherboard for the computer I'm about to build that supports it. I noticed that Intel does not yet have one. Do you know of a good one, or when these will be out? Also, is there a benefit to spending the extra money on a 22" monitor versus a 21"? It seems like they are all around 20" viewable, and it seems a waste unless the 22" gives you a larger viewable screen.

Bruce T.

A: *Intel's 8X AGP boards are right around the corner. There's "Canterwood," which will be known as the 875 chipset. That's the one for enthusiast and high-end users. Then there's the 865 "Springdale" chipset, for more budget-minded consumers. Both use DDR memory and support the upcoming Pentium 4 processors with an 800MHz front-side bus.*

Whether or not a 22" monitor is worth purchasing over a 21" monitor is subjective matter, of course. Naturally, it's not worth it if the viewable area is the same, but if you ask me, it's not that big of a difference anyway. We're talking about a 5% increase, unlike the substantial leap from 19" to 21".

Q: A few days ago, I got some videos on AVI format with codec, but they don't play as smooth as I would like to. A friend told me that it's because of my video card, an on-board one with only 8MB. This friend has a Radeon card, and those videos play perfect on his machine. Could this be the problem?

Alejandro M

A: *It might be. An AVI file could be using one of many different video codecs, and some of them are quite CPU intensive. If you and your friend have the same CPU, it would point to your video card as the weak link. But my guess would be that you have a weaker CPU and it can't keep up with the strain. Either that, or you've got background tasks running that are be using up some of your system resources, like a virus scanner or peer-to-peer file swapping utility.*

Q: I've got a cable modem, hooked up to a Netgear router, which is hooked up to three computers. I have Windows XP and there is a firewall option within the control panel, but even with that off I can't play online. I am aware that the router has its own firewall built in (because of the router's IP and the modem's IP), but does this really have an effect? I have trouble playing online with all kinds of games, from *Medieval: Total War* to *MechWarrior 4: Mercenaries.*

Matt

A: *You're probably experiencing a problem with your router not letting the proper ports through for playing multiplayer games. A great many games use DirectPlay's ports, which are TCP ports 47624 and 2300-2400, plus UDP ports 2300-2400. Depending on the title, you might need to open up additional ports as well. Your Netgear router, or the support web page, should tell you how to do this (most modern home routers have simple web interfaces). To find out what ports need to be opened, look in the readme file for your game, it's almost always listed in there.*

Q: I bought a pair of these removable hard drive bays that fit in the CD spots, so I can switch a particular drive between two of my systems. I'm having a problem getting either system to "see" the drive I have in the bay, regardless of how I fiddle around with the IDE cables and master/slave setup. Is there something I am simply overlooking? Is it user error?

Jane

A: *The regular parallel IDE spec does not allow for what they call "hot swapping," which is adding and removing drives on the fly. SCSI does, and so does the upcoming Serial ATA. It will be a pain, but for now you'll have to turn off the systems when you add and remove the drives, then boot up again.*

Alternately, you can buy an external USB 2.0 enclosure and put the drive in that. You can plug and unplug USB 2.0 devices (including hard drives) all day long. It won't be the fastest thing in the world, but if you're looking at mostly just data backup and swapping large files and the like, it would work fine. FireWire is another option, but don't even attempt USB 1.1 or anything like that, which is about 40 times slower than USB 2.0.

Q: My computer is a Pentium III 733. I just upgraded my memory from 256 to 512MB and now my computer freezes up. It will just turn itself off and I won't be able to reboot for 15 minutes. Is there anything that I can do to fix it?

Craig S.

A: *Diagnosing a problem like this is difficult without seeing it firsthand and trying out a few things, but it sounds like you might have bad RAM, the wrong type or speed of RAM, or a faulty motherboard. Try pulling out your new RAM and see if it works fine with your old stuff. Also, try using just your old memory but try it in each of the different motherboard sockets. If all that works, I'd return your newly purchased memory for a refund (and when you buy new memory, do your best to make sure it's of the exact same type as your current stuff). It's possible that the additional RAM is using up too much power. If your power supply was only just barely giving your system enough juice to run stably before, the addition of new components, even just a stick or two of memory, could cause instability.*

ing incessantly. Ugh. The story line is also bird brained. Suggestion: Stay away from this 1-star turkey.

Steelhead Battalion finally answers the question: What do 'Mechs do when they aren't fighting one another? Who asked? There are some good innovations here. The graphics are surprisingly crisp, and the music is also good. It has to be. There is a great deal of waiting, and you need something to keep you from falling asleep. The game captures Championship Bass fishing too well. You can literally spend a day trying to catch the fish needed to advance. It is a novel idea, but ultimately very boring except for those into this sport. 2.5-stars.

SFI's crowning jewel out of this triumvirate is *Nazgul Thunder 2003*. Now here's a game that brings a new dimension to auto racing. It gives you numerous options for building and outfitting your car, and is packed with strategy, numerous racetracks, and customizability. The graphics are state of the art; the sound appropriate, with a surprisingly catchy soundtrack; and the controls are absolutely perfect. SFI definitely got this one right. This is a 5-star game. Don't miss it!

M. Hrovat

ERRATA

The ratings for Panzer Campaigns: Kursk '43 and Naval Campaigns: Tsushima were swapped. Kursk should have been 3.5 stars, Tsushima 3 stars.

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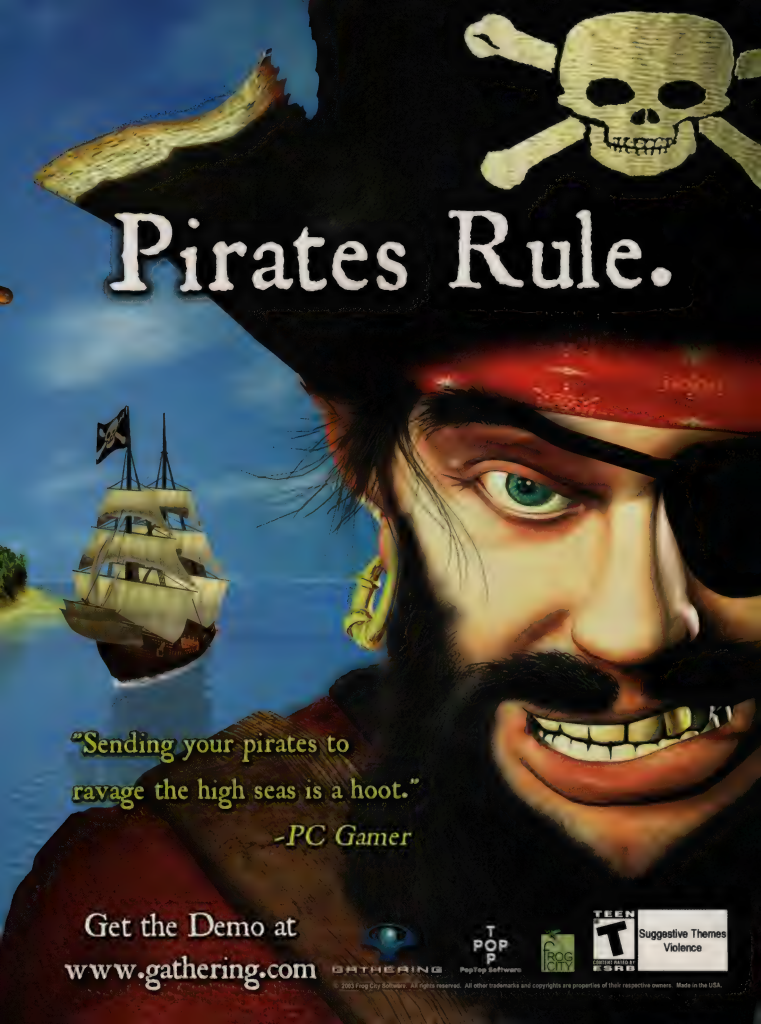
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Conventions

The industry explores itself in conferences and awards

BY ROBERT DE LOS REYES, ESQ.

LATE FEBRUARY AND early March may bring cold weather and teasing glimpses of spring to most of the U.S., but to the game industry, they bring conventions. On February 27 and 28, the Hard Rock Hotel in Las Vegas, Nevada played host to the D.I.C.E. (Design, Innovate, Create, Entertain) summit, now in its second year of existence. And where there's a convention, there's an awards show. Hosted by Dave Foley (of *News Radio* and *Kids in the Hall* renown), the Academy of Interactive Arts and Sciences held its sixth annual industry awards. Technically separate events, the simultaneous happening of the summit and the awards show means never having to put down your cocktail. Dave Foley didn't.

Unlike the now sprawling Game Developers Conference (GDC) that follows the week after, the D.I.C.E. summit remains a smallish affair. The summit runs for a compact two days and, this year, featured 11 lectures and panel discussions. There's only one official ring in the D.I.C.E. circus. You either attend the lectures in the single lecture hall or hit the craps tables, but there's no expo center or competing lectures from which to choose. For those able to resist the siren's call of the casino floor, the one-at-a-time, all-in-one-room presentation format means sitting in on some topics you might otherwise not think of interest.

It all opened sleepily enough. Most of the people awake in Las Vegas at the 9AM start time for the lectures are people who haven't yet been to sleep from the

"An Audience with the Masters" session featured Yu Suzuki and Shigeru Miyamoto.

Spring Eternal

night before. But those who arrived late missed David Jones, of the former DMA Design (think *Lemmings* and *Grand Theft Auto*), exploring in detail his central theories of design. On the other hand, if you've played *Grand Theft Auto*, you can probably guess his thesis: Create a living world first, and then reward the players for doing what they want to do there. But maybe here's something you didn't know. "If you want to know where *GTA* came from, it came from *Pac-Man*." According to Jones, the dots became people, and the ghosts became the police.

Other designers on hand included Shigeru Miyamoto and Yu Suzuki, who spoke (through translators) together about their respective careers and theories of design. Chris Taylor, designer of *Dungeon Siege* and *Total Annihilation* among others, discussed designing games for the mass market. Taylor, clearly in his manic phase (which is normal for him), provided a welcome burst of energy in his early morning slot, providing more quotable material in every 60 seconds of speech than some people will utter in a lifetime.

Typical of many of the speakers, Taylor's speech meandered wherever his interest took him. Although *Dungeon Siege* sold well by most any industry metric, he still doesn't think it hit the "mass market." In particular, he seemed disappointed that the mod community didn't flourish in the way he hoped. Still, he believes he achieved many of the things he believes critical to design success. First among those achievements was the creation of a seamless (no load time) world. Just as important, however, is that he thinks they did a good job launching players into the action and keeping that action flowing. If there's one thing Taylor can't abide, it's lengthy exposition: "Where's the exit to town?! I just want to kill something! Can I kill you? I can't kill that woman with the baby?! That sucks!" Impatient gamers of the world, Chris Taylor feels your pain.

The parade of celebrity game designers continued. Raph Koster (*Star Wars Galaxies*, *Ultima Online*), Brad McQuaid (*EverQuest*), Rich Vogel (*Star Wars Galaxies*, *Meridian 59*) and Will Wright (all things *Sim*) all gathered onstage to discuss making and running persistent world games. Scheduled for an hour and a half, this panel could easily have filled a day discussing their own experiences and the questions from an audience eager to explore gaming's newest frontier. The consensus of the panel: persistent world games are hard. They're hard to make, hard to balance (assuming you believe in balance), hard to run, and hard to support. A disastrous launch will doom you. New games must compete against the content level of established games. And then there are the fans. A diplomatic Koster reports, "Players aren't stupid … they're just highly involved."

The list of luminaries expanded beyond developers. Syd Mead, the visual artist chiefly responsible for the looks of the *Blade Runner* and *TRON* movies, spoke about his career and methods. The founders of BioWare, both medical doctors, offered a nuts and bolts discussion of project management and corporate structure.

And then came Seamus Blackley, the former head of Microsoft's Xbox project and now of Capital Entertainment Group. He stood before a crowd of his peers to deliver a lecture entitled, "No, You're Wrong." Persistent world games may be exciting the imagination these days, but few topics evoke the visceral responses of Blackley's topic: the publisher/developer relationship. That relationship is, according to Blackley and nearly every developer in the room, broken. But there is hope, he said through snickers from the audience, "Why do publishers behave as they do? It's not because they're evil or stupid. Really." He ticked off the different market forces that publishers face, forces that developers tend to feel only in an indirect way. In fact, he spent most of his time explaining or defending publishers, which was a tough sell in a room of developers.

On the first night of the summit, just down the hall from the lecture room, the AIAS put on its awards show. Dave Foley served as host, joined by a laundry list of late night syndicated TV hotties to present awards. Technical glitches and putrid canned "jokes" induced audience-wide cringes, but a free-flowing bar in the back of the auditorium mellowed the mood.

The list of award recipients is littered with worthy titles, though it and every other of its kind spawns debate. Perhaps no category grabbed quite as much attention, however, as the Online Game of the Year. In a category that also included *Asheron's Call 2*, *Toontown Online*, *Dark Age of Camelot: Shrouded Isles* and *Anarchy Online: The Notum Wars*, it was *The Sims Online* that walked away with the prize. Summoned to the stage to receive the award, Will Wright appeared pained to accept it. Wright peered straight into the audience and vowed to make *The Sims Online* worthy of the acknowledgement it had just received. Vegas odds makers haven't put out a line yet, but the smart money is always on Wright.

Sixth Annual AIAS Awards

In tandem with the D.I.C.E. summit, the Academy of Interactive Arts and Sciences, a largely publisher-sponsored institution, presents its annual game awards. The AIAS awards are actually older than D.I.C.E., this year's awards being the sixth year for the shiny baubles of glory. Presented in the style of the movie industry's Academy Awards (minus a frumpy and agitated Michael Moore), the AIAS follows the Oscar's cue in declining to use the phrase "The winner is ..." Rather, "the award goes to":

Awards Open to PC and Console

Game of the Year **Battlefield 1942** (PC)
Console Game of the Year **Tom Clancy's Splinter Cell** (Xbox)
Computer Game of the Year **Battlefield 1942** (PC)
Innovation in Console Gaming **Animal Crossing** (GC)
Innovation in Computer Gaming **Battlefield 1942** (PC)
Outstanding Achievement in Art Direction **Sly Cooper and the Thevius Raccoonus** (PS2)
Outstanding Achievement in Animation **Sly Cooper and the Thevius Raccoonus** (PS2)
Outstanding Achievement in Original Music Composition **Medal of Honor: Frontline** (PS2)
Outstanding Achievement in Sound Design **Medal of Honor: Frontline** (PS2)
Outstanding Achievement in Character or Story **Eternal Darkness: Sanity's Requiem** (GC)
Outstanding Achievement in Game Design **Animal Crossing** (GC)
Outstanding Achievement in Gameplay Engineering **Tom Clancy's Splinter Cell** (Xbox)
Outstanding Achievement in Visual Engineering **Lord of the Rings: The Two Towers** (PS2)
Online Gameplay of the Year **Battlefield 1942** (PC)
Massive Multiplayer/Persistent World Game of the Year **The Sims Online** (PC)
Family Title of the Year **Mario Party 4** (GC)

Console Only Awards

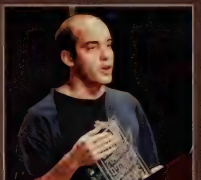
Action/Adventure Game of the Year **Grand Theft Auto III**
First-person Action Game of the Year **Medal of Honor: Allied Assault**
Role-playing Game of the Year **Neverwinter Nights**
Sports Game of the Year **Madden NFL 2003**
Simulation Game of the Year **The Sims Unleashed**
Strategy Game of the Year **WarCraft III: Reign of Chaos**

2003 GDC Awards and the Fifth Annual IGF Awards

Hard on the heels of the D.I.C.E. summit and AIAS Awards in Las Vegas came the Game Developer's Conference and the Independent Games Festival in San Jose, California. The latter two events were held simultaneously, as were their respective awards presentations. Unlike the AIAS awards, the developers themselves vote on the GDC and IGF awards. A pat on the back from one's peers is always gratifying. If you're one of the independent developers of the IGF, you'll also be pleased to take the cash and prizes that come alongside the pat on the back. The GDC Awards make no distinction between PC and console titles for awards purposes. The IGF probably wouldn't either if there were such a thing as indie console games. But there aren't. And the winners are:

2003 GDC Awards

Game of the Year **Metroid Prime** (GC)
Lifetime Achievement Award **Gunpei Yokoi**
Excellence in Programming **Neverwinter Nights** (PC)
IGDA Award for Community Contribution **Doug Church**
Original Game Character of the Year **Sly Cooper and the Thevius Raccoonus** (PS2)
Excellence in Visual Arts **Kingdom Hearts** (PS2)
First Penguin Award **Larry Kaplan, Alan Miller, Bob Whitehead, David Crane and Jim Levy** (the founders of Activision)
Excellence in Audio **Medal of Honor: Allied Assault** (PC)
Excellence in Game Design **Battlefield 1942** (PC)
Excellence in Level Design **Metroid Prime** (GC)
Excellence in Writing **Tom Clancy's Splinter Cell** (Xbox)
Game Innovation Spotlight Award Recipients **Animal Crossing** (GC), **Battlefield 1942** (PC), **Medal of Honor: Allied Assault** (PC), **The Thing** (PC/console)



Rookie Studio of the Year **Metroid Prime** (Retro Studios)

Fifth Annual IGF Awards

Innovation in Game Design **Wild Earth**
Innovation in Audio **Terraformers**
Innovation in Visual Arts **Wild Earth**
Technical Excellence Award **Reiner Knizia's Samurai**
Audience Choice Award **Pontifex II**
Seumas McNally Grand Prize **Wild Earth**

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2002 GAME of the YEAR: PC GAMER
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OVERALL GAME of the YEAR: IGN.COM
"This game has it all. ...Battlefield has hooked just about everyone I know that's laid hands on it."
BEST MULTIPLAYER GAME of the YEAR 2002: CGW
"Ridiculously addictive online warfare..."
MULTIPLAYER GAME of the YEAR: GAMESPY.COM
"...An easy and unanimous choice for Best Multiplayer Game of 2002."
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GAME OF THE YEAR
BEST MULTIPLAYER GAME
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CHALLENGE EVERYTHING

Back to the Future

Full Canvas Jacket promises to turn an old classic flight sim into a contender for Sim of the Year

THE ULTIMATE FLIGHT sim is here, and it's five years old. It's called *Red Baron II*, and thanks to the work of dedicated modders like Mitchell Kent, better known in circles as "Kess," this beloved old game is as good as any sim on the market today—and better than most.

The original *Red Baron* came out in 1991, followed by a sequel in 1997. *Red Baron 3D* was basically the same game with 3D support (but only Glide for 3Dfx cards.) Fans typically refer to both the sequel and *Red Baron 3D* interchangeably as *Red Baron II*, and the game was an instant favorite for modders, who've produced new plane graphics, terrain mods, historical corrections, sounds, and much more for years. In fact, there are so many patches and modifications available that someone new to it can be overwhelmed and confused. For example, some patches which have date dependent modifications (such as when in the war certain planes become available) require a campaign manager program to swap items in and out. Adding to the confusion for newbies is the fact that some patches conflict with each other. Throw in the requirement of a 3Dfx card to enjoy the improved graphics of the mods and it's enough to cause anyone with a casual interest to throw up their hands and walk away.

Two significant developments have changed the outlook. The first is Glidos (www.glidos.net), a file that allows those with modern video cards to run the game in all of its Glide 3D enhanced glory. The second is the advent of all-in-one "Superpatches" that combine improvements in graphics, sounds, damage, and more into one overarching patch. While a couple of superb Superpatches are currently available (such as the Hell's Angels patch at www.jamrom.com/hellsangels and the Western Front patch at www.swwisa.net/wfp) the community is holding its breath in anticipation of the release of what promises to be the ultimate Superpatch, *Full Canvas Jacket*, from Mitchell Kent.

The differences in the plane detail, sky, clouds, and terrain between Full Canvas Jacket and the original Red Baron 3D [above] make it hard to believe it's the same game.

Full Canvas Jacket is an all-encompassing mod that enhances every aspect of the sim you can think of, and then some. It redoes the graphics, from the terrain and trees (which change to reflect the seasons), to the sky and clouds, to the incredibly detailed and historically accurate aircraft. It also features revamped engine and gun sounds, and improved flight and damage models. Additionally, a huge amount of effort has gone into creating a historically accurate simulation. Best of all, there's no need for any other patch, other than Glidos if you have a non-3Dfx card—add *Full Canvas Jacket* to your install and you have what looks and plays like a great 2003 flight sim. While Kent will be selling the patch, Sierra business representatives have said they have no problems with his efforts.

You have to wonder why anyone would put so much time and passion into a major mod for an old, out-of-print game. Kent has an artistic background, playing guitar with a band on the Hollywood club circuit at the age of 18, recording albums, signing with an indie label at 27, and then moving into the production side of the business, doing everything from album artwork to producing music videos.

How does a professional musician end up writing mods for an old WWI flight sim? "Back in 1989 I was living out in Palm Springs and was over visiting at a friends house when I first got the chance to play a WW1 computer game called *Wings* that my friend had on his Amiga computer," he says. He was immediately hooked, and when the original *Red Baron* came out, he built a computer just to be able to play it. He says he played the game day in and day out for years, figuring out the maximum kills possible in a

campaign (310). He played other sims and games, but never lost his obsession with *Red Baron*, carrying that passion over to *Red Baron II* and *Red Baron 3D*. In late 1998 Kent started experimenting with the game's data files, tweaking the graphics and sound, and eventually opened his renowned Promised Land web site for mods (www.wingwalkers.org/jasta1/newplmain.htm).

But why spend his artistic talents on *Red Baron II* and not a newer, more modern sim? "I was attracted to the pioneering nature of planes in WWI," he says. "The technological leaps that happened as that war progressed, the up close and personal nature of dogfighting in those old biplanes, requiring flying skill, being a tactician, marksmanship, not to mention the situational awareness that was a huge part in staying alive in a dogfight with so many enemy entities in such close approximation." He says that despite its age, *Red Baron* was always the logical choice for modification, with its unequaled dynamic campaigns in single player, mega multiplayer online arenas, variation of units and aces, and so on. "It has a great following and a dedicated enhancement community that keeps improving upon it day after day, week after week."

The *Full Canvas Jacket* Superpatch is a collaborative effort. Promised Land recently joined up with a conglomeration of modders that formed a group called SWWISA (Society of WW1 Sim Artisans). "There was a lot of time invested into researching squads and aces in WW1, trying to put units in historical timelines, at the right locations, using the plane types they historically used," Kent says. "The aces from all countries involved show up and transfer to the various units they belonged to, they are wounded and in the hospital at their historically correct dates, returning to their squads at the historical times, and they are also killed or wounded or sent home on the proper dates." Kent worked extensively with Steve Fabart of SWWISA in an attempt to recreate WWI aerial warfare in as historically accurate a manner as possible. This is not so easy, as there is a lot of conflicting information. "It's been a definite labor of love attempting to piece history back together in some sort of reasonable facsimile of historical truth, not to mention trying to bring all the various info together in a concise package while dealing with the limitations set forth in the game." Kent states the overall goals for the patch is to combine the historical aspects with audio and video quality good enough to almost produce the impression of being in a movie.

Not bad for an amateur designer and a five year old sim. —*Jeff Lackey*

Full Canvas Jacket will be available for $28.00, including world wide shipping, from ww.wingwalkers.org/ jasta1/merchand.htm with a target ship date of May 1st, 2003. Places where Red Baron II *or* 3D *can be purchased, along with a wealth of other info on the game, can be found at www.gemmrig.de/www.wingsofhonor.com/redbaron3d/newbie/*

spotlight

Doom Nation

Masters of Doom: How two guys created an empire and transformed pop culture

Random House, hardcover, $25

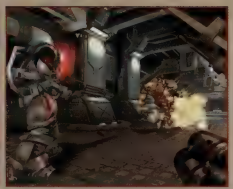
With his famed locks shorn, his Ferrari sold, and his new six-person team delving into the burgeoning handheld market, legendary game designer John Romero's life is now quite a bit more streamlined than it used to be. David Kusher's 300-page "behind-the-scenes" tome about two of video gaming's most prestigious virtuosi, refers to Romero as "The Surgeon" who once lived large.

Over half a decade of research and interviews went into this authorized account, and the result is a series of snapshots that spans several years. The collection describes an 11-year-old Romero sneaking out to the arcade despite repeated warnings from his stepfather to stay away from games; and then takes a look at John Carmack, whose father was not only a Kansas City anchorman, but also a *D&D* Dungeon Master. Apparently, the "Two Johns" met at Softdisk and started making shareware games together. Their 1993 release of DOOM gave birth to a new generation of gamers, and also gave the fledgling games industry its first "rock stars."

More fact than flash, the book provides a rare look into the inner sanctum of one of the most notorious computer game companies. This rags to riches tale should appeal to both casual and avid gamers alike.
–Suzanne Ashe

newsbytes

Imperium Changes Name—CDV has changed the name of *Imperium Galactica 3*, a real-time strategy game due out this winter, to *Galaxy Andromeda*… **Generals in a Brown Paper Bag**—Germany placed *Command & Conquer Generals* on the list of restricted games arguing that the game glorifies war. This means it can't be advertised or displayed on shelves in Germany… **Rally the PC**—Codemasters will release a PC version of *Colin McRae Rally 3* for the PC this summer… **Tie-ins to Bad Boys**—Empire Interactive acquired the right to make a game version of the *Bad Boys II* movie. **Dead on the Money**—Legacy Interactive is making a sequel to its Law & Order game to be shipped this year, called *Dead on the Money*… **Inexpensive, not cheap**—Vivendi Universal is creating a "Best Seller's" product line for its PC games, much like the console companies do. The company requires that the games in the program sell in excess of 200,000 copies at a price equal to or above $19.99. The initial batch of games, which will be priced at $9.99 and come in an actual box, include such stellar titles as *Tribes 2*, *Homeworld Game of the Year Edition*, *Pharaoh* and *Cleopatra*, and *NASCAR Racing 4*…. *News courtesy of Frictionless Insight (www.frictionlessinsight.com)*



HIGH HEAT MAJOR LEAGUE BASEBALL 2004: DangerZ's High Heat editor lets you keep the focus on the field; NO ONE LIVES FOREVER 2: Don't let them detonate the Doomsday Device; UNREAL TOURNAMENT 2003: Take on an invasion of monsters in the new Unreal Tournament 2003 bonus pack.

Eat Your Paisley

Cate Archer's life just got a whole lot tougher. *No One Lives Forever 2* developer Monolith has released two new multiplayer modes for the 1960s spy spoof shooter as part of the 28MB version 1.3 update. Doomsday is an interesting team-based variant on capture the flag where the agents of UNITY must work together to keep HARM operatives from assembling all the components of the Doomsday Device. Team Deathmatch is pretty much exactly what it sounds like. The update also adds minor multiplayer features, fixes a few bugs, and tweaks some rules in regard to weapon and splash damage. A big map pack adds about ten new maps for these modes, too.

Have a Bloody Xmas

Christmas has come early for the *Unreal Tournament 2003* community. Epic Games and Atari have just released a second official bonus pack chock full of new content, including new game types, maps, adrenaline combos, announcers, and music. Three new game types are featured. Mutant turns the first player to score a frag into a, er, mutant, with all weapons and special powers; the only catch is that his health immediately begins to deteriorate and can only be kept up by maintaining a high body count. Last Man Standing is a lot like the option from the first *Unreal Tournament*, but Invasion is a neat new mode where players work together to fight a wave of monsters, mostly from the original *Unreal*. All game types are playable in the ten new maps, which include extra meshes and textures that can be imported into the *Unreal* editor. Frilly extras like the pint-sized and camouflage adrenaline combos, new announcer choices, and the OGGPlayer that gives players direct control over in-game music, can of course be used in all modes of play as well.

Improve High Heat

Anyone who's struggled with the nutty, mouse-free zone that is the interface in *High Heat Major League Baseball 2004* should thank the gods for DangerZ. The *High Heat* modder (better known to friends and family as Eric Pilote) has just released the latest version of HHEdit, a "donateware" program that should take a lot of the hair-pulling out of team management by letting you tinker with rosters outside of the game's horror-movie menu system. It also allows you to adjust all league parameters, make HTML stat reports, pack and unpack texture files, and edit sound.

Odo Would Have Approved

Fans of *Star Trek: Deep Space Nine* will want to check out The Pelican's Dominion Wars mod for Taldren's *Starfleet Command III*. As the total conversion is based on the galactic conflict that dominated the last two seasons of the spinoff from *The Next Generation*, it features most of the civilizations in the Trek universe. Nine races are featured in the multiplayer map, including big players like the Federation, the Dominion, and the Borg as well as little guys like the Ferengi, the Maquis, and Species 8472. A total of 66 new ships, two new space stations, and 11 replacement ships fill out the fleets of the battling empires. Five new mission scripts have been added for Conquest mode as well. Version 1.0 of Dominion Wars clocks in at 143MB.

But What Can Be Done About Bud Selig?

Out of the Park Baseball addict Pierre P. has come to the rescue of online league managers struggling with how to handle drafts. His new draft utility adds a lot of functionality when dealing with such matters as trading picks and organizing rounds for extra-large leagues. It supports *Out of the Park Baseball 3-5* and the two releases in the sister *Season Ticket Baseball* series. *—Brett Todd*

Links

No One Lives Forever 2 nolf2.sierra.com

DangerZSoft www.dangerzsoft.com/htmltonuke.php3?filnavn=hh2004.htm

High Heat 2004.net www.highheat2004.net

Unreal Tournament 2003 www.unrealtournament2003.com

Dominion Wars 1.0 www.fileplanet.com/files/120000/121268.shtml

True League Baseball www.trueleaguebaseball.com

DO YOU REMEMBER THE DAY THAT THE NUBIANS SET FOOT ON THE MOON?

IT WAS 58 MINUTES IN THE MAKING. History changes in an instant. Never more so than in Rise of Nations, a new real-time strategy game from Brian Reynolds, lead designer of Civilization II. Experience the depth of turn-based strategy games in an RTS that spans through 6,000 years of history and 18 ancient civilizations. It's the most intense RTS of its kind. There's fast. Furious. Faster. Defend, defeat, bargain, befriend, plot and plunder. Do it all under the gun with zero margin for error. Nothing is historically impossible and only the quick and the brazen survive.

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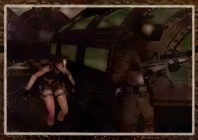

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The gritty urban underbelly of Europe offers whole new environments.

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A bloody crime scene. A ritual killing. A shocking suspect. And so the daring pursuit of good becomes the desperate flight from evil. And if the dark forces arrayed against her believe she's incapable of the ultimate, they're about to learn a painful lesson: Payback's a bitch.

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Shock and Awe

After five years of virtual silence, Valve finally unveils the sequel to ***Half-Life***

DEVELOPER Valve • PUBLISHER TBD • RELEASE DATE September 30

BY STEVE BAUMAN

SEPTEMBER 30TH. Circle it on your calendar, as it's the day Valve promises it will finally deliver a sequel to *Half-Life*. Though the existence of a sequel to a game widely considered to be the best first-person shooter—if not the best PC game—ever made doesn't exactly come as a shock, the proximity of its announcement in April to its release later in the same year is surprising.

Gabe Newell, Valve's founder and Managing Director, says the company started its development right after the original *Half-Life* shipped. "Because of the sales of the first game and the amount of fan and critical support, we have a very rare opportunity to do something dramatic with *Half-Life 2*," says Newell. "We could have come out with *Half-Life 2* pretty quickly and said 'Here's more of the same,' but we thought that we'd take the time to figure out what we thought were the interesting opportunities in terms of technology."

It wasn't until September 2002 that it finished a "proof of concept" to demonstrate the "high-risk" technology they felt they needed to do the sequel justice. (Newell says they're inventing things that have never been done before in a game.) What the company showed to the press in March was essentially that "proof-of-concept" demo.

The basic scenario has players once again donning the nerd glasses of scientist-commando-guinea pig Gordon Freeman. It takes place some time after the events in the first game. It turns out that Freeman decided to join up with the G-man because, as Writer/Designer Mark Laidlaw says, if they chose the alternate ending, it wouldn't be much of a sequel. (But a game where the player jumped into

Welcome back to Half-Life. You might want to get that headcrab problem looked at. [inset] Gun battles and aliens have a distinctly Starship Troopers movie vibe . [right] The urban areas should provide plenty of opportunities for destruction. [far right] City 17 has a typical Eastern-European look to it.

the abyss, surrounded by aliens, "would be extremely easy to make," he jokes.)

Once again, players will experience the entire game exclusively through the eyes of Freeman, with no third-person view cutscenes or mission briefings. Laidlaw admits that they weren't convinced that sticking with the first-person view throughout the first game was the way to go, and in fact, one of the reasons it ended up that way is because they never had time to make a Gordon Freeman model without the suit. He says there are limitations to this approach but that it forces them to make some interesting decisions to compensate. "We just scratched the surface [in *Half-Life*] of things we could do with narrative," Laidlaw says.

Half-Life 2 is primarily set in a fictitious European city called City 17. You and the rest of your original science team are in this new setting for a reason, which only becomes clear as you play the game. In the original, there were a few characters, and a lot of running into the same guy over-and-over again. "We didn't realize [characters] would be important," Laidlaw says. "They were nameless scientists and security guards, and they just became this strange thing that fleshed out part of the world."

You'll still see plenty of scientists, workers, and soldiers, but greater varieties of characters fill out the new settings. Some specific characters are back, like Eli Vance, who has a daughter named Alyx who also plays a significant role. While there will still be a number of "Barneys," there's also one main fleshed out sidekick. There's also a new alien threat that's considerably more "organized and sinister" (to quote Laidlaw).

Valve is focusing a lot of its technological might on its characters because, according to Newell, doing so "broadens the emotional palette of the game designer." The obvious improvements are present: higher polygon counts, higher resolution textures, some minor skin and hair effects. Moving beyond that, in addition to having a skeleton, the characters also feature musculature. As a character moves its arms, the muscles counter rotate, making it look like they have actual flesh as opposed to being a fixed polygonal model.

There are many additional technologies at work that make the characters look and react to their environments better than anything you've seen in a game thus far. For example, they've focused an inordinate amount of attention on the eyes of characters. "Eyes aren't ping pong balls, little round spheres you stick in the head," says Senior Engineer and Project Lead Ken Birdwell. "They're squished vertically,

These scenes show some of the facial animation at work on the Alyx character. Note the reflection in her eyes.

slightly. We model the cornea correctly, modeling reflections properly, so as she looks around, the highlight in her eye moves slightly as she turns her eyes side-to-side." They've even gone so far as move the eyes slightly. "The optical sensor isn't directly in the middle," says Birdwell. "If it was, everyone would look cross-eyed. There's about a four-degree offset." All of this is designed to get characters in the game to look directly at you without having the zombie eyes of Aida in *Unreal 2*.

Even more dramatic is the facial animation. Rather than design expression and mouth "engines" to make characters more expressive, Valve used existing research from the 1970s that broke the face down into 20 basic movements, a sort of facial grammar. Unless you're Jim Carrey, you can only do certain ones in concert with others so there's a simple database of combinations that generate realistic and natural plausible characterization. This same technology also generates lip-synching. "It's not quite Disney quality," says Birdwell, "but for the cost [in processor cycles, design time, etc.], it's amazingly cheap."

A Half-Life scientist (left) meets the Half-Life 2 model.

It all sounds like the ultimate example of technology run amok, but when you see it action it all makes sense. Using the model for Alyx Vance, Birdwell demonstrates the system, and it's amazing, showing off more real-time generated detail, variety, and expression than you'd think is possible on an in-game model. Characters exhibit much more personality (for lack of a better term) when merely standing idle. Rather than just stare blankly at the player, the eyes of Alyx Vance wander a bit. "She actually queries the room to find interesting things to look at," says Birdwell, and if the player moves, she focuses on Gordon.

In addition to focusing on characters, Valve has also written a completely new 3D engine. It has many of the same features of the *Unreal* or *Lithtech* engines, but the devil's in the details. *Half-Life 2* will have indoor, urban, and full-blown outdoor open-area environments, and Valve is focusing a lot of its technological effort on subtle details that, in many ways, are more effective and naturalistic. "We could use all of them in a really gimmicky way to stand out, but we're really trying to sell this reality inside the game, and when something seems wrong, it really jumps out at you," says Jay Stelly, like Birdwell a Senior Engineer and Project Lead. "It's more about a way of maintaining a suspension of disbelief, and being consistent, and all of our technology is designed in service to the game."

Visually speaking, the all-new 3D engine isn't going to send John Carmack back to the drawing board. It's more competitive than radical, but Valve is shooting for a much broader target. They have a lot of information about the people that still play *Counter-strike*, and it's not pretty—for example, enormous numbers still have TNT2-level videocards. Rather than aim for *DOOM III*-level specs in order to guarantee *DOOM III* -level "oh my god" visuals, the plan is for it to run (barely) on a Pentium 700 with a DX6-class videocard. "Obviously we'd like people to have the latest hardware so they can experience the game the best way possible," Stelly says, and the current optimal target is a 2GHz system with a GeForce 4.

There's also a new physics system that appears more realistic than competing ones. As with other games all textures have different properties: density, friction, thickness, etc., and each item has a calculated mass. The physics system determines whether objects can be destroyed, picked up, and what sound they make when struck by a weapon. The combination of skeletal and muscular modeling of characters, when thrown into the physics system, produces realistic falling and movement in any environment. With just the physics system, Stelly demonstrated a giant camshaft with pistons and dropped a giant wrench into it, which caused it to seize. "The physics let us realize a lot of things we wouldn't otherwise be able to do," he says.

For *Half-Life 2*, Laidlaw says Valve wants to continue to look for opportunities for intentional narrative tricks to enhance the story. Though again they won't talk about specifics, one of the more brilliant strokes of *Half-Life* was the opening train ride. Sure, on the one hand it was dull, but it gave the player a greater sense of place than any

other scene in other shooters (some of the rooms in *Jedi Knight* had a similar effect). They want to create environments no one has ever tried before in a game.

Of course they won't show any of those environments. Instead, Software Developer Josh Weier fires up a level with actual gameplay, which likely won't exist in its current form in the final game. (All levels will also be broken into smaller chunks to make load times short, much like the original.) The scene takes place inside a jail, with multiple alien attackers and soldiers fighting it out. The soldiers are already taking cover, hiding behind things, and the aliens are navigating the environments properly.

Another scene, set in a large outdoor area, shows off some new AI tricks, such as a new alien hierarchy that makes decisions based on evaluating you and other soldiers as threats. It also demonstrates impressive movement and pathfinding, where aliens are able to navigate complex environments by jumping across gaps and figuring out optimal paths to reach the character.

In another scene, the player is caught in the crossfire of a street war between soldiers and aliens in a dense urban environment. Newell says nothing in this type of scene is scripted, and they're trying for interesting emergent behavior when planned narrative and AI intersect. "How do you author stuff that's cool without derailing the AI?" he asks. "It's like you're structuring these things to talk to the AI. 'If you're not doing anything else more important, you can come over and do this interesting thing.'"

As you try to navigate the city, you hear this mighty stomping noise. That can't be good. It's one of the new aliens, and it's merely a few stories tall and apparently upset about your existence. A bridge blocks its path to you. The alien first uses physics to get through, by trying to destroy the bridge, but that doesn't work. Then it sticks its head underneath in order to figure out if it can go under it. Ah, that works, so it crouches, sticks each of its spindly legs through, and manages to pull off one of those little *Half-Life* "whoa, I didn't expect that" moments.

So it's a lot of nifty technology. So what? It's easy to counter any concerns about the emphasis on technology over gameplay at this stage by noting that this is exactly how Valve demonstrated the original *Half-Life*, and that turned out okay. In fact, it's fair to say that, based on Valve's history, *Half-Life 2* should be amazing. However, it's also fair to say that Valve's history consists of exactly one game. (You could include *Counter-strike* and *Team Fortress*, but since Valve isn't talking about multiplayer yet, this is more about the single-player game.)

Still, no amount of skepticism, if you can even call it that, is going to keep the press and gamers from praising its mere existence to the high heavens. It won't be at all surprising to read articles calling *Half-Life 2* anything from the greatest game ever made to merely being the savoir of PC gaming. There's little doubt it's leapfrogging *DOOM III* to reach the top of "biggest games that should, in theory, ship in 2003" list.

But extrapolating a whole lot about the actual game is, at this point, pretty much impossible. Will it have the impact of *Half-Life*? Who knows? But is it immediately the one game this year that no one can wait to see? You bet.

dark age of Camelot
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Savage

DEVELOPER S2 Games
PUBLISHER iGames
RELEASE DATE July 2003

S2 GAMES SURPRISED everyone last year when it gave players a taste of *Savage*. Most companies have decided that hybrid online games simply can't work (*Battlezone* excepted). This real-time-strategy-third-and-first-person-shooter-with-role-playing-elements has fans excited because, at a glance, its mixture actually seems to make sense.

In March, S2 invited the press into its sandbox to look at a pre-release version of the game. Destroy enemy. Win. Simple? Probably not. It is a world of "esques," though. It's *Tribes*-esque, *Warcraft*-esque, *Unreal-Tournament*-esque… many esques, actually. You enter the world and decide whether you're in a "being on top" mood. If so, you wind up in the command center with a birds-eye view of the entire battlefield and an RTS game to manage. If not, you find yourself playing the action game, where you enter the field half naked with an itty-bitty melee weapon and a basic bow ("leveling" and better equipment is where the RPG element comes in).

In the pilot seat, it feels just like your mother's RTS—initially. But controlling living, breathing resources changes gameplay significantly. In other RTSs, the AI doesn't care whether or not you're a jerk. People, however, do. ("I'm not doin' *that*, he's gotta be kidding.") Assessing the dynamics of your team is a real challenge—especially if you don't know their style.

On the ground, you have a few options: You can (A) "yes milord" the commander, (B) run rampant killing things (beneficial for all), or (C) try to figure out how to screw up the game for everyone else. The world is more beautiful from this perspective, in a grasses-waving-in-the-breeze kind of way. And if you chose A, color-coded "orders" on the map will easily guide you. Also, the camerawork, if fully realized, should be very effective.

Will this extremely elegant approach to hybridization work? With no true prototype, it's really hard to say. It seems like a fertile climate for griefers, and may have to overcome some "too-many-Generals-too-little-cannon-fodder" issues. But regardless of whether it ends up slick or sticky, in the end, it'll depend a lot on everyone "playing nice."

–*Cindy Yans*

The bow action seems somewhat realistic, in a fantasy sort of way.

Some of the buildings are organic-looking, and almost Myst reminiscent.

Players of *Etherlords* will notice a much-streamlined interface. [below] You can view the adventure sequences down close and personal.

Etherlords II

DEVELOPER Nival Interactive
PUBLISHER Strategy First
RELEASE DATE September 2003

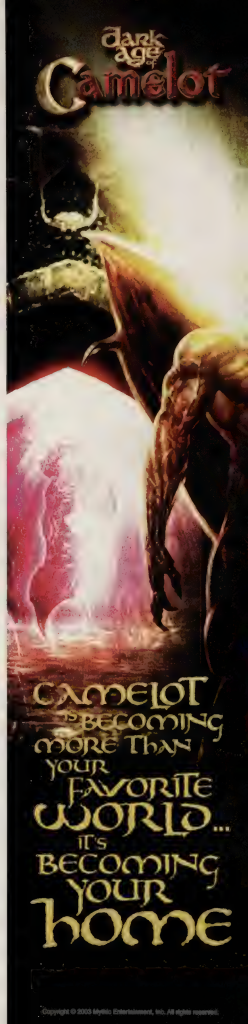
RUSSIAN DEVELOPER Nival Interactive has been mixing and matching strategy and role-playing elements since it released its first *Rage of Mages* game in 1998. Never quite satisfied with the results, it is still striving for that elusive, perfect blend. *Etherlords II* skews heavily toward role-playing and adventure, but again relies greatly on its turn-based tactical combat.

The game still evokes a sense of *Heroes of Might and Magic* meets *Magic The Gathering*, with its turn-based structure and "deck building" components, but is much more story-based this time around. Senior Producer George Chastain, Jr. explains that this is actually a shift in focus. "They were actually going in the direction of [the original] *Etherlords* for a long time," he says, "but then they decided, 'you know what? Let's make the fans happy.'" This novel revelation sent them back to the drawing board.

While the original *Etherlords* placed you in charge of a number of heroes, its sequel gives you one hero at a time for gameplay on sequential "maps" (formerly "missions"). The game consists of five campaigns in three levels of difficulty, the first two of which have a pair of heroes to choose between. As you play each hero, you'll see the story through that character's point of view, so to get the entire story, you'll need to play all of the races. They hadn't cemented the concept of the fifth campaign at this writing, but note that, possibly, your ultimate character will be some uber-mix of all the other races.

Rather than mandating a list of mission directives, each map will allow a lot more exploration, with the advantage of being able find more powerful items. The visuals–always one of Nival's strong points–are wonderfully detailed here, with breathtaking spell effects, and a camera angle that effectively pans in on them during the adventure sequences.

The developers seem unwilling to accept the possibility that their perpetual quest to hybridize may be unlikely to satisfy hardcore fans of either genre, but in heeding the advice of their faithful player base, they are determined to try once more. *–Cindy Yans*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OK, focus, one-two-slash-kick! A twi'lek practices some new combat moves.

Jedi Knight: Jedi Academy

DEVELOPER Raven Software
PUBLISHER LucasArts
RELEASE DATE Fall 2003

"KYLE KATARN ISN'T the hero of *Jedi Knight: Jedi Academy*," says Producer Graham Fuchs to the assembled press at developer Raven Software's studio in Madison, Wisconsin. "You will create your own character and can customize him or her as you like," says Fuchs. The game uses a new role-playing game-like character development screen, letting you customize your race, body type, clothing, coloration, and gender. During the game you'll get to upgrade your Force Powers. Although only two playable races were revealed during the demo, the human and the Twi'lek (those guys with tentacles growing out of their heads), we see from screenshots you can also play a Rodian (like Greedo). The developers do promise many more, however, all of which will be established *Star Wars* aliens from the comics, books, and films. In fact, you can customize everything but your name. Raven is making the name permanent to preserve the logic of the game's cutscenes. "It'll be a nice gender neutral Star Wars name," says Developer Jon Zuk.

A new leading character isn't all that's new or different for this game. In *Jedi Academy* you play a Jedi novice being trained by mercenary-turned-Jedi-Master (like his father) Kyle Katarn and Luke Skywalker. Raven was intrigued by the idea, from the movies and books, that Jedi train at the Jedi Academy by going on missions to right wrongs throughout the galaxy with their master. So they've given the game a non-linear mission structure. Exactly how this works is top secret for now, but they will reveal that the game lets you pick and choose your missions. They also hinted that by choosing Dark or Light Force powers as you go, you'll actually affect how the game ends. Essentially bringing back that fateful choice Kyle had to make near the end of the original *Jedi Knight*. Whether you end up a Dark or Light Jedi determines what missions will be available at the end of the game. Hinting that maybe, you can actually join the bad guys rather than destroying them.

Raven is using the same heavily modified *Quake III* engine to power the game, but has added new technology, most of it from *Soldier of Fortune II*. There's new texturing and artwork that makes canyons and rubble look more authentic, huge and wide open—a few of them are twice as big as the largest one in *Jedi Outcast*. You'll also see new special effects enhancements like lightsaber wounds that stay on character models, and chunks that break off walls. They're also adding new combat moves and more animations for saber combat than ever before, which help make those thrilling close combat saber battles even more epic and cinematic.

"[*Jedi Outcast*] players complained that the saber didn't show up until the fifth mission," notes Fuchs. "So we're letting you start with it now." He explains that the

focus of this game is definitely on the saber combat. Most of the other weapons appear, but you're encouraged to play the whole game with just the saber. It is, as one Jedi put it, more elegant than a blaster. There are three new types of sabers as well as new stances, moves, and acrobatics. You can grab the standard model, or you can train to use two at once like Anakin Skywalker does in *Episode II*, and, of course, there's the saber-staff popularized by Darth Maul in *Episode I*. Each style lets you access special moves. Most of them are secret for now, but Zuk demonstrated that saber staff wielders can kick nearby enemies, knocking them off balance. While the saber combat moves are growing more complex, Zuk explains that they've kept the premise as simple as it was in the first game. "If you're a novice you're going to be able to mash buttons and feel like you're doing cool things, just like the movies, but there's depth there. You can learn the combo moves and really master the saber."

They also have not neglected the Force Powers. There will be new ones and refinements to most of the old ones. You'll see new special effects and some alternate uses for older Powers, and you can now combine Force Powers for special moves—even while in combat. A demonstration revealed that you can combine Force Push with Force Throw and you'll crouch down as your saber circles your body like a deadly satellite. If you combine Force Speed and Force Jump and you can briefly run straight up walls like some kind of Jedi Jackie Chan. They're adding some new Force Powers as well, such as Force Absorb, which steals enemy Force Power, and a Dark Side version that steals health, and Force Sense, which lets you see your enemies through walls.

MRaven promises that this game will be even more mod-friendly than before. Now you can add user-made content to the single or multiplayer game by dragging and dropping files into folders. With more development time than *Jedi Outcast* had, and plenty of player suggestions, the team promises that *Jedi Academy* will have tighter missions, solid pacing, new villainy, and the chance to make your own character. At this writing most of the level design, storyline, artwork, saber animations, and Powers are in place, so they have until Fall to refine and polish. That should be plenty of time. *—Andrew S. Bub*

[below] A rodian Jedi plans his attack. Expect more of that Star Wars scale. [right] Rodian vs. Goliath. You have to distract the Rancor.

Homeworld 2

DEVELOPER Relic Entertainment
PUBLISHER Sierra
RELEASE DATE Late Summer 2003

SIERRA'S ALEX RODBERG thinks the original *Homeworld* "broke the rules." And he's right, at least in the sense that it was the first real-time strategy game to successfully recreate the 3D-ness of space. Developer Relic Entertainment did an excellent job of taking a fundamentally difficult problem—navigating and controlling units in a truly three-dimensional space—and making it relatively simple. Oh, and it made a superb strategy game too.

However, "relatively simple" isn't quite the same as "simple." For *Homeworld 2*, Rodberg says a lot of work is going into refinement. "It's important to bring in modern gamers," he says. With that in mind, they've developed what he rather unfortunately described as a "one-handed interface" (meaning you can control everything with the mouse). When you select units, you get a standard movement disc on the same horizontal plane, but holding the right mouse button lets you select movement along a vertical axis. It's simple, and appears quite elegant. (As demonstrated, the game really wasn't far enough along in development to properly gauge how it will work during actual play.)

Bringing in "modern" gamers is usually synonymous for "dumbed down for the masses," but Rodberg says that other changes should make fans happy. He says there will be more strategy, because they're giving players more pieces to play with, each with more elements. "We want people to win with different strategies," he says, with winning more of a matter of executing those strategies than of mastering an interface or clicking faster.

The single-player game ties in elements from the first game, forcing players to deal with the consequences of returning home, and the truth behind the player's original exile. The core of the game is still amassing giant armies and attacking your opposition, but you will generally control squads as opposed to individual ships. Rodberg says the coolest new feature, and one he thinks other games will offer, is a modification to the way the game handles formations. When you select a group of disparate units, you can choose to make them a Strike Group. At this point, the AI evaluates the unit mix and puts the ships

[above] Players can upgrade their ships and add features to various hardpoints; you can also target them in battle. [below] Though it's hard to tell from screenshots, there's considerably more visual detail on each unit.

into a proper combined arms formation. Once in battle, that formation will make adjustments depending on whether or not you're attacking or defending.

Other changes include the addition of hardpoints on motherships, which you can target, and changes to the handling of the environment which, according to Rodberg, makes the occupation of space important. For example, some objects can have turrets attached to them, giving them defensive abilities. The game still uses dust clouds for resources but they, like the rest of the game, have received a significant graphical boost and have new tactical uses. Finally, as with *Impossible Creatures*, Relic plans to make the game extremely mod-friendly.

Rodberg says that Relic is conscious that there's a certain amount of danger in trying to recreate that type of major leap. "[*Homeworld 2*] is an exercise in toning down the ambition [of the original game]," he says, though he doesn't mean that in a negative way. He wants people to think of the original game with two years worth of polish, resulting in what he says will be "an incredible refinement of gameplay." *–Steve Bauman*

Halo

DEVELOPER Gearbox Software
PUBLISHER Microsoft
RELEASE DATE Fall 2003

BACK IN THE ancient annals of time, let's say around 2001, Microsoft unleashed its Xbox console on the world. Pretty much the only reason to buy one then, and for some time afterwards, was to get your mitts on Bungie's *Halo*. With great vehicle driving, combat, and scripting, the game was easily still the best Xbox title a year after launch. For PC gamers, though, every ooh and aah from the console crowd just twisted the knife—when were we going to get a shot at the brass ring?

Most likely, this year. The wait, however, might prove to be worth it if the game manages to deliver the thrills of November, 2001 to a new audience. But why would PC jockeys care about a two year-old shooter? "If you're a PC first-person action gamer who hasn't spent a lot of time with *Halo* on the Xbox, there's no decision to make," says Gearbox's Randy Pitchford, calling it a "no brainer." For fans of the console game, though, Internet play and new content are the big draw.

Changes, of course, include a full on PC control scheme. "We are hard-core FPS gamers making the game we all want to play," says Pitchford, with "PC style" controls. Like most console ports, the game will keep the Xbox save point system. Pitchford thinks that the original scheme worked so well that there is no need to include a save-any-time capability. Multiplayer will focus completely on competitive play, with no cooperative mode available on the PC. There will, however, be new maps and weapons for all players, and even new vehicle types in multiplayer matches. Pitchford says that Bungie and Gearbox are "passionate" about helping the mod community, but won't reveal to what extent that will translate into editors and the like.

Calling PC *Halo* "the most difficult and complex port we've ever done," Pitchford is confident the result will be worth your while. *–Cindy Yans*

[left] In a multiplayer game, Team Red is going berserk. [below] Master Chief saves the day.

Black & White 2

DEVELOPER Lionhead Studios • PUBLISHER Electronic Arts • RELEASE DATE TBD

PETER MOLYNEUX KNOWS the original *Black & White* didn't deliver. You can see it on his face. It wasn't the game he promised, or the one the press fell all over itself to praise before its release. What Molyneux and his team at Lionhead delivered was more of a series of sketches that only occasionally delivered glimpses of its greatness; the majority of the game was a series of doodles.

Black & White 2 is where it's all supposed to come together. The original had no shortage of ambition and vision but the sequel is supposed to be more about that other, slightly important part of making a game: implementation. "I talked to literally hundreds of people about what they did and didn't like," Molyneux says. You're still playing a God, and you still get to train a cute earthly manifestation of your godliness in the form of your creature, but he says they're focusing more on the overall design and structure. "It's all about war and peace," he says, and players begin the game with Eden at war. As a player, you have two options: create and command armies to take over the world or try to protect your empire, winning everyone over with your essential goodness. And there are plenty of shades between the two extremes.

Molyneux says the sequel does away with some of the busywork of the first game and lets you focus on more "godly" activities, including more "epic" miracles you can perform (though none were available for demonstration). There's less training for your creature now, focusing instead on larger activities like commanding troops or destroying enemy walls. Improvements to the visuals of the creature let them show more of the "morphing" between good and evil approaches, and hair modeling can visibly show damage and weather effects. It sounds somewhat silly, but in the game, it looks pretty cool.

Molyneux feels they got a bit too rigid with the notion of "no visible interface" in the first game, so there will be menus for selecting certain game functions. You control armies now, with a "Thread" interface similar to the leash for controlling your creature in the first game. It lets you easily string units together to produce large formations, or you can tie them to your creature and let it lead them into battle. *Black & White 2* is also more of a city-builder game, where you plunk down structures, create defenses (walls, mainly), and there's no longer a citadel or a fighting between creatures interface.

There's still a lot of those weird Molyneux touches: the structures will visually show your good-evil alignment, the landscape models grass so that roads develop on heavily traveled areas, bad weather accompanies evil armies, there's dynamic water (that looks fantastic), and in general, more emergent behavior. As for a release date, Molyneux just laughs. "We're not going to get into that again." In other words, it's too early to put a release date on it, though by the next time he shows it to the public and press, he'll have a better idea. (Expect, as a guess, March 2004.)

If *Black & White 2* sounds a lot more like a standard real-time strategy game with giant dancing cows, you'd be right. Though in many ways as impressive sounding as the original, the concept is starting to sound a lot more conventional—which is probably a good thing. —*Steve Bauman*

The evil ape, with his perfectly modeled hair, torments a village.

Every girl's crazy about a sharp dressed thug. The graphics for the PC edition are noticeably improved.

Grand Theft Auto: Vice City

DEVELOPER / PUBLISHER Rockstar Games • RELEASE DATE Summer 2003

RUMOR HAS IT, *Grand Theft Auto: Vice City* is a fairly popular game on the PlayStation2. Those plucky upstarts at Rockstar Games have sold around eight million copies of the thing and caused a (fortunately) brief renewal of interest in A Flock of Seagulls. Thuggery is still the name of the game as you drive around town taking on missions or performing random acts of gratuitous violence, only the setting has moved from Liberty City in *Grand Theft Auto III* to Vice City, an "homage" to Miami circa 1984 or so. The possibilities for awful haircuts and bad synthesizer music are endless, and the PS2 version definitely captures that weird Reagan-era vibe.

As with last year's *Grand Theft Auto III*, the PC version is trailing its console brother by a few months and does offer a few upgrades. It has improved graphics, with larger view distances, improved texture resolution detail and color depth, and offers some user customization in the form of support for MP3 playlists (sub in Kajagoogoo for Talk Talk) and alternate skins for the lead character. It also supports the mouse and keyboard as the main control scheme, which will likely remain a better way to play the game, particularly when it comes to gunplay.

Is it essentially the same game as *Grand Theft Auto III*? Sure. But you know you can't resist beating up old ladies with a baseball bat while Nena's seminal hit "99 LuftBallons" plays on the soundtrack.
–Steve Bauman

There's nothing quite as menacing as a man in a floral print shirt.

quick takes

AGE OF MYTHOLOGY: THE TITANS

The lost civilization of Atlantis returns in this first add-on to *Age of Mythology*. This expansion will offer an original single-player scenario and plenty of unique maps. The new mythological units and heroes will give you the opportunity to harness the might of the Titan immortals, and you'll notice a decided power shift in this world of gods and monsters as the Atlanteans stand and deliver. [Microsoft]

CALL OF DUTY

Yet another gritty and epic WWII first-person shooter joins one of this year's most popular clubs. 22 of the people who created *Medal of Honor: Allied Assault* are in charge of this title in which you'll control different characters from multiple sides of the Allied forces, all intent on toppling the evil aspirations of, you guessed it, Nazi Germany. [Activision]

PIRATES OF THE CARIBBEAN

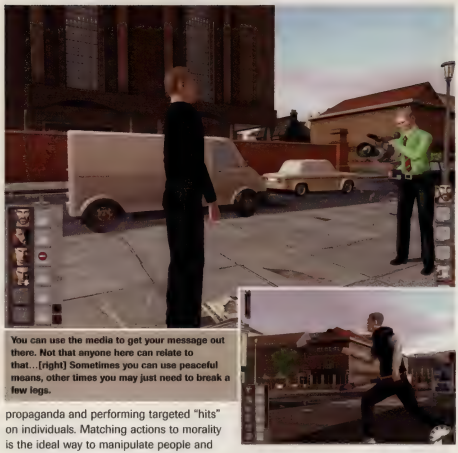
***Sea Dogs II*, the graphically stunning role-playing game expected last December, didn't disappear. While at heart it's still Akella's original pirate swashbuckler, the publisher couldn't help but jump on an opportunity to name it after and attach it to Disney's film releasing in the same timeframe. Integrated components from the movie? Sure. Johnny Depp? Er, no. [Bethesda Softworks]**

Republic: The Revolution

DEVELOPER Elixir Studios • PUBLISHER Eidos
RELEASE DATE August 2003

THERE'S NO GETTING around it: *Republic: The Revolution* is a complex game. The overall premise is simple: "You're the charismatic leader of a new faction out to oust the President of the Republic… by any means." The setting is a fictional country, Novistrana—which means "new country" in Russian—in the 1990s just after the break up of the Soviet Union. You'll spend your time in the game manipulating the population through the media, business, the military, and through general thuggery in order to turn people against the existing president. You "win" the game if there's a military coup, people's revolution, or a forced resignation. But other factions are doing the same thing you are, and that president won't go down without a fight.

The game plays out in real-time "turns" that take place over a day. You create an avatar and can "recruit" others to assist you. Each character has an internal moral compass that illustrates how you might want to best deal with the person. Interaction consists of selecting from hundreds of different "Actions" to perform on a person or region, and these range from organized rallies and riots to broadcasting propaganda and performing targeted "hits" on individuals. Matching actions to morality is the ideal way to manipulate people and get them on your side. Some actions include mini-games that let you better control the amounts of influence and coercion, though none were actually available for demonstration. All of the game's dialogue is in subtitled "Russian," and that's in quotes for a reason. Though it sounds authentic, it is in fact a fake language much like Simlish. It's a terrific feature, and gives the game a better sense of place than it might otherwise have.



You can use the media to get your message out there. Not that anyone here can relate to that…[right] Sometimes you can use peaceful means, other times you may just need to break a few legs.

As with a lot of Bullfrog and Peter Molyneux games, you can zoom into street level and see a lot of AI-controlled activity. Each person in the game has a daily routine.

Republic isn't the kind of game design you'd typically expect from someone in his mid-20s, but Demis Hassabis, the game's Designer and the founder of Elixir Studios, isn't a typical 20-something. According to his bio, Hassabis was teaching himself chess at the age of four (most people were probably eating chess pieces at that age). By the time he turned 12, he was the world's highest rated player for his age, and at 16 was the Project Leader and Lead Programmer for *Theme Park* with Peter Molyneux.

Like that game, and others from Bullfrog and its founder Molyneux (including the upcoming *Black & White 2*), *Republic* is a series of complex AI systems with literally thousands of people and things to track. Though it appears relatively simple to play, it's a lot of game to balance. Hassabis says the game is essentially finished, with all features in place, and the last few months of its development will focus on play balancing and testing. It's an ambitious game with a unique premise, and for that reason alone, it's one of the year's most interesting products. —*Steve Bauman*

You'll be able to perform combat from a number of wheeled and aerodynamic vehicles.

Chrome

DEVELOPER TechLand • PUBLISHER Strategy First • RELEASE DATE June 2003

CHROME IS A first-person shooter that attempts to wear a Coat of Many Colors. As mercenary Bolt Logan, you are running away from your past and find yourself in a situation that looks as though it might tarnish your stellar track record. You and your companion Carrie travel to the distant planetary system of Valkyria, and discover that its rich deposits of the valuable material Chrome have become the source of contention between a couple of mega-conglomerates. You get caught between them…and one of them is lying.

Developer TechLand's Chrome Engine produces lush graphics that rival most other contemporary shooters. Movement entails walking, crouching, crawling, and slithering prone on your belly, the latter of which will hide you from the AI (or human) opponents if it's in a region with tall grass. You slither extremely fast, too. Although there are some indoor environments, most will be outdoors in various terrains.

Using weapons from a complete but somewhat vanilla arsenal, you can either "shoot from the hip," or aim between the eyes (they gave up on a possible leg shot). "You can [kill] a guy a lot faster with a shot in the head, but it's also harder to do it, so I usually just aim for the chest," says Associate Product Manager Ryan Bastien of publisher Strategy First. "It doesn't take a lot of bullets to kill most people in this game." By repeatedly shooting a stray corpse as it performs a macabre series of jerking motions, he demonstrates the game's rag doll physics. "Hit 'em with a grenade and they go flying, and sometimes a leg will get caught on a railing and they'll just hang there."

With so much competition out there, a shooter that's merely good looking just isn't enough, but the Director of Marketing for Strategy First, Steve Milburn, believes that *Chrome* isn't your typical shooter. "The biggest defining characteristic of this game is the way it combines all the separate parts of the shooting genres," he says. And sure enough, it has *Deus Ex*'s cyber-implant system, *Rainbow Six*'s tactical shooter sequences, and *Halo*'s vehicle combat and sense of team play. *Halo* has been the biggest influence on this game, including its lack of a save-anywhere feature. PC gamers will probably frown at this, even if *Chrome* does it as elegantly as *Halo*.

In fact, the folks from Strategy First said the word "Halo" no less than thirty times during the demonstration. Maybe repetition is convincing. They seem to have convinced themselves, and maybe TechLand can even convince you. –*Cindy Yans*

Join now! Be a 'mech, or look just like one!

quick takes

EXARCH

Formerly known as Trade Wars: Dark Millenium, this online-action role-playing game places you in a fantasy sci-fi setting. The game world concept belongs to comic book artist Joe Madureira, creator of the well-known series Battle Chasers and former artist for Marvel's Uncanny X-Men. [NC Soft]

BIG MUTHA TRUCKERS

Meet Ma Jackson, proprietor of Big Mutha Truckers, Inc., and her kids Cletus, Earl, Rawkus, and Bobbie-Sue. Ma's retiring, and you play one of her brood driving head to head against your sibs. Whoever makes the most money trucking through Hick State County in 60 days takes control of the company. Screw your family, your truck, other road users, and buy, sell or swindle your way to a fortune. [Empire Interactive]

WARLORDS IV: HEROES OF ETHERIA

Driving with a brand new engine, this fantasy turn-based strategy game challenges you to build heroes, each of whose goal is to create the mightiest force in the Realms of Etheria. In addition to the usual skills, spells, and pursuit of higher levels, the game includes "The Speed Tactical System," which speeds up strategic gameplay without sacrificing the important tactical component. [UbiSoft]

Battlefield 1942: Secret Weapons

DEVELOPER Digital Illusions • PUBLISHER Electronic Arts
RELEASE DATE Fall 2003

[left] Fire at will. [above] With any luck, you won't get your pants caught on a church spire.

SOME GOOD GAMES arrive surrounded by a huge fanfare of press and marketing buzz, while others kind of sneak in through the back door. Digital Illusion's *Battlefield 1942* did the latter, coming in under the radar as one of Electronic Arts' seemingly "oh-by-the-way" offerings last year. This amazingly fun and popular WWII team shooter with a heavy multiplayer emphasis has already spawned one add-on, *Road to Rome*. This year, a new expansion will invite you to leap from your C-47 (remembering to use your parachute) into a whole new batch of battlefields.

While *Road to Rome* didn't offer a lot of new content, *Secret Weapons* will offer eight new maps, ranging from Norway, to Germany's industrial heartland, to Hitler's Alpine Eagle's Nest retreat. Designed to get you into combat fast, the new areas will include night missions and more use of fog for atmosphere. They've minimized the use of other weather effects however. "We want to keep the frame rate as high as possible for a wide audience of players," explains Producer Mikael Rudberg.

New toys include the aforementioned C-47 transport plane, which will operate as a mobile spawn point. With a pilot and five passenger slots, it enables you to board it on the ground or spawn into it in flight. Then there is the Armstrong Whitworth AW-52, a British flying wing jet aircraft that in reality flew some years after the war but could have conceivably made it into the fray against the Axis. In fact, a number of the vehicles and weapons in the game were merely WWII wannabes that either appeared later, were prototypes, or never made it off the drawing board.

All in all there are 16 new vehicles, including the Sherman tank with a T-34 Calliope (rocket launcher), and the massive German Sturmtiger. You'll also see some fragile yet super fast jet aircraft, and the Wasserfall, a unique guided missile. The arms in your arms include an automatic sniper rifle, a combat shotgun, the Bren light machine gun, and a silenced Sten submachine gun. The Germans receive the Gewehr-43 automatic sniper rifle and the Gewehr 42 paratrooper rifle, as well as a rifle grenade attachment to the K98.

Gameplay additions include a new objective based mode where each team is tasked with accomplishing a specific task-oriented mission. British Commandos and German Elite troops join the order of battle as well. Finally, EA is promising a top-secret prototype Rocket Pack for the Germans. (Heil the Wehrmacht!) Developer Digital Illusions is attempting to make *Secret Weapons* more about engagement than its predecessors. "We designed our levels to concentrate the action and to (constantly) keep players within deadly range," says Rudberg. "That does not mean that battles are confined. What it does mean is that the players will not be spending a lot of time off by their lonesome trying to get to the action." –*Cindy Yans*

Phew! That Wasserfall anti-aircraft missile is just a bit too close for comfort.

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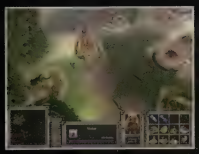

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Shadows and Fog

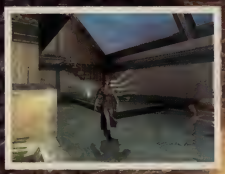
Deus Ex: Invisible War and Thief 3 are all about player choice, and the highest-resolution darkness money can buy

by Kelly Wand

IN A CONFERENCE room in Ion Storm's Austin offices—which bear a disturbing resemblance to a *Deus Ex* level, from the futuristic food "machines" and keypads on every door to the wall-mounted machine-gun turrets—its studio head Warren Spector is smiling ruefully. On the big screen at the front of the room, producer Bill Money demonstrates "rag-doll" physics for *Deus Ex: Invisible War*. He shoots a guard in the head and sends his corpse pinwheeling elegantly out of view through an impossibly narrow slit between wooden bleachers. "Now I'll want that to happen every time," moans Spector. "And it won't. Ever."

A lot of game designers wish they had Spector's problems. Although he'd be the first to (rightly) dissuade you from considering every title he's been involved in as a "Warren Spector" game, his track record has few rivals: *Wing Commanders 1* and *2*, *Ultima Underworld*, *System Shock*, *Crusader: No Remorse*, *Thief*, *Deus Ex*, all in the wake of an illustrious apprenticeship in the field of board games. In person, he's articulate, elfin, personable, and waxes sagely in a honeyed radio announcer's voice on any topic you can think of. He and the games he's contributed to make the whole industry look good. He's its "Orson Wells" and Ion Storm its "pre-Kevin Smith Miramax."

And as Wells learned time and again, acclaim and profit seldom arrive together in equal amounts. One of his former employers, Looking Glass Studios, is no more. Even with a *Deus* Ex movie and sequels to both game franchises on the



way, why crappy games make the most money is a mystery that eludes and fascinates Spector. Although, to his regret, he once told an exec, "I make decisions that lose you money every day," he's hardly above commerce. Ironically, he cites *Thief* as an example, a miraculous C-section that was initially conceived as *Dark Camelot*, a first-person combat game with a sophisticated sword-fighting mechanic. In this game, you play a good Mordred, struggling against an evil King Arthur and his knights.

Spector counters the suggestion of someday resurrecting that concept with, "Name a single 'King Arthur'-related piece of entertainment that made money."

Dark Age of Camelot?

"I said *Arthur*-related."

John Boorman's *Excalibur*?

"That's the one that everybody says. Made nothing."

That 1960's musical?

"Exactly."

Nor does he think that low budgets are responsible for crappy games. In fact, if he could have only one game on a desert

[above] Some of the unruly characters you may encounter in Deus Ex: Invisible War. Heavy modifications to the Unreal engine like real-time lighting and detailed models make the game look far better than its predecessor. [upper left] An all new Thief emerges from the shadows. Powered by the same engine, sneaking around never looked so good.

Though you can gun down your foes in Invisible War, Ion Storm promises you'll be able to complete the entire game without killing anyone.

island for the rest of his life, he says he'd choose *Tetris*. Yes, *Tetris*. You'd think that a game where you invariably lose in the end would just enhance the suck factor if you were already rotting away on an island, but Spector is ambitious. "You could always get a higher score," he insists. (The suggestion that it's too angular, and that as a straight guy you'd want more round shapes in your visual environment, he summarily dismisses as infantile.)

The Invisible War

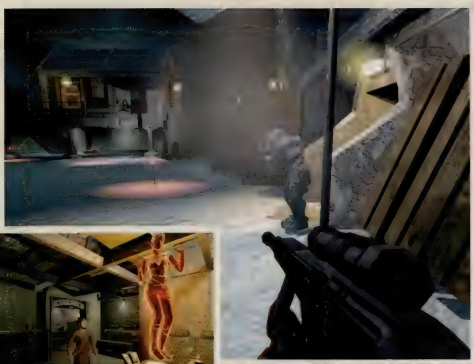
Less infantile is the sequel to *Deus Ex*. Writer Sheldon Pacotti's storyline has *Invisible War* taking place twenty years after the ending of the original game, which was circa 2015. You play Alex D, "the next step in the nanotech manipulation of the human body." Alex, whose gender and skin color is up to you, is a clone of the first game's hero JC Denton. JC's status is uncertain. All program director Harvey Smith says about which of the first game's endings they used as the sequel's backstory is, "We did something weird." (With any luck, they'll work in the first game's abandoned notion of JC being the blood-descendant of Jesus.) Alex begins the game working for something called the Tarsus Academy. UNATCO is no more, and with the destruction of Chicago by a nanite bomb in a bravura opening cutscene evocative of *Akira*, your character heads for Tarsus's Seattle HQ. As the game progresses, you choose between serving the theocratic Order, the corporate WTO, the nanotech-hating Templars, or None of the Above.

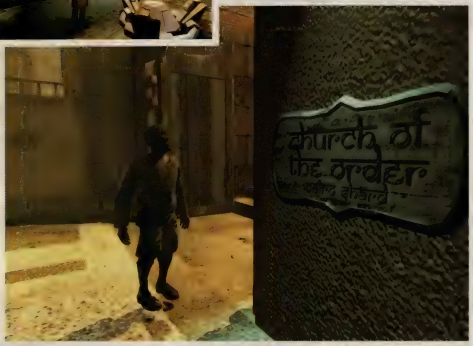
They've evolved the original *Deus Ex*'s cybernetic augmentations into "biomods" that are merged with the skill system via a swanky new petaled HUD that overlays your character's retina at a keystroke. You have nine slots among which to disseminate 21 mods and upgrade them three levels. Although you still can't switch out your augmentations at will, you can now overwrite existing ones (and, by doing so, forever lose them and any upgrades you had). As before, you choose between two forms of the same mod. You can use your "eye mod," for example, to produce spy drones that let you see distant areas, or to gain enhanced vision similar to that of a sniper scope. Another mod renders you immune to all laser-triggers. There are also mods analogous to the Dark Jedi powers in *Jedi Knight* that are available through "black market" locations. "Health Leech Drone" restores health points at the expense of a non-player character's. "Bot-domination" enables you to assume control of repair or attack bots.

Weapon mods and lovable multi-tools are back (thankfully no item will take more than a single slot of inventory space this time), and the designers have included several new tools for the stealthy player, such as the glass destabilizer, which soundlessly melts glass without setting off alarms.

Visible Environment

Ion Storm has transformed the *Unreal* engine (with frosting from physics giant Havok) to the point where it is completely unrecognizable. The only game besides *Invisible War* using a lighting model this





[top to bottom]
Exploring a frozen base in Antarctica, where you can spend your time blowing things up or sneaking around; This hologram looks slightly out of place in such a dingy environment; Invisible War even includes a daytime setting in Cairo, though it's no doubt still "dark and atmospheric" daylight; New bio-mods will let you control this janitor-bot. Good for recon and...dusting.

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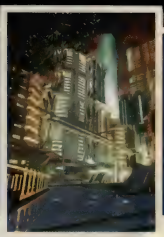
Spector Speak

Having emerged from the world of *Dungeons & Dragons* and many other board games, Warren Spector has spread his talent among many temporary ports of call such as Origin Systems, Looking Glass, MicroProse, and others. He sat down for an interview to discuss Thief 3 and Deus Ex: Invisible War.

Is filling leisure time intelligently the last product of civilization?
If I could define "civilization," I'd have an easier time answering that. It probably is, I guess. How many Utopian visions have there been where the whole idea is to have ultimate leisure time? Either that or it's the end of time, or the end of history like Fugiyama said. The apotheosis of civilization or the end of history as we know it. I'm not sure. Isn't that a *Deus Ex* thing to say?

Which of Deus Ex's multiple endings best sums up your political viewpoint?
When we started, the only endgame was the "merge with Helios" ending. That was mine. The idea of making the ultimate sacrifice for mankind by giving up a part of your humanity seemed like the only appropriate resolution. Others on the team disagreed, and it was out of their vehemence that the other endings came into being.

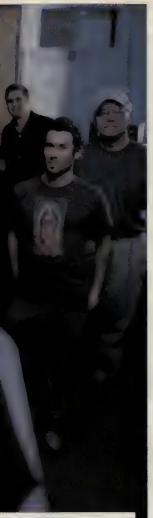
What do you think was the last revolution in games and what will be the next one?
Maybe it's just wishful thinking, but the last one was the one we're still living through: player choice. *Grand Theft Auto*, *Tony Hawk*, all sorts of sports games are putting power back in the players' hands where it should've been all along. Hopefully it'll become so conventional that people don't make any other kind of game. The next revolution? We think we "get" the free-form gameplay thing here at Ion Storm, so what we're concentrating on is next-generation lighting and physics and simulation tools, because that's the way you take free-form gameplay to the next level. The revolution after *that* is the one I'm most excited about, scared by, and clueless about, and that's human interaction. And I'm not talking about person-to person, massively multiplayer. In the single-player space, you've never interacted with an NPC you felt was human in any meaningful way. And I don't know how to do it or



advanced is *DOOM III*, although Spector and Smith both predict that it'll be considered the industry standard within a few years. They even use increasingly trendy terminology to convey its wondrousness. "It's all volumetric and dynamic and things shine with maximum specularity," says Smith.

"Volumetric," as *Thief 3* lead designer Randy ("the other") Smith patiently explains, "means that everything in the game is capable of casting shadows on everything else, including itself. This has significant impact on gameplay—the player can 'create' shadows, then hide in those shadows." The average character in the game will have a rough polygon count of 3,000 (nearly a third of that devoted just to facial expressions) but the lighting also uses "normal mapping" to provide more 3D detail. (Normal mapping's sort of like putting one glass into another one that's half-full of milk so it raises the milk level to the brim—except with graphics.)

It seems that the lighting is easy, now that these tools exist. It's the artificial intelligence that's hell. Spector and Smith concur that this was the chief shortcoming of the first game. "We're spending a lot more time working on the AI this time," says Smith. "In general, the AI is much more analogue in its sensory perceptions and reactions." And the character models are no longer enclosed in invisible "tubes" that made them so hard to sneak up on.



I'd be doing it. I have some clues. The next baby-step is making them *look* human. It's not a solved problem but I can see where to go, and if I can see it, others can see it. But it's the step beyond that, where you're interacting with an NPC in non-violent ways that are as interesting and compelling as the violent ways we already do so well. As opposed to just "Bank," "Buy," "Sell."

Is there an overriding premise to coding AI?

One thing I should've thought of myself but had to learn from other folks at Looking Glass after many hours of discovery was...Well, I really used to think AI should behave like real humans and that its role in a game was to beat the player. Like a boss monster. That's completely wrong. The goal of the AI, which was refined during *Thief* to within an inch of its creative life, is to make the player's job more fun. And it's grueling hard work, but it frees you from the constraints of having to recreate human behavior, which is a lost cause.

Lately shooters have picked up the AI slack by just having more and more guards.

And if you're not killing guards, you're not doing anything. Because there's nothing else in the game to do. And the environment's a different toolset, not a reward; you don't have time to enjoy the art. In *Thief*, you're rewarded for clearing out an area and enjoying the scenery. But you're also rewarded for not stopping to enjoy the scenery by not getting spotted by the guard you don't want to kill. It's about expressing who you are as a player, not showing how clever the designer was.

Do you ever catch heat over "mature content?"

Yeah, all the time. *Deus Ex* almost got banned in Germany two weeks ago, after two years of being on the shelves. Local television here a couple Christmases ago did a piece on violent videogames and ran clips of *Deus Ex*. I was invited to be on the Bill O'Reilly show, and Phil Donahue. I turned them both down. It's a set-up. Once you see the crying mother up there, you've lost. There's no point. This too shall pass. People used to write a century ago how dime novels were ruining kids. Then it was the movies. Then it's comic books, then it's pinball parlors, then it's television, it's *Dungeons & Dragons*, it's whatever the current adult population doesn't understand because it's not theirs. It's mortality, it's their fear of being replaced. It's pathetic but it's human. I do not care about videogame violence. We cause nothing. We do no damage. Twenty years from now, some poor schmuck will come along with a new medium and have to deal with the nastiness of getting caught in the cultural crosshairs.

In the new game, physics and body mass are absolute. There are still limits. Programming the AI to react to your shadow would be possible, but Smith feels that it would make the game too hard. "The biggest win, though, is how we've handled physics sound effects," he says. "That's programmer Brian Sharp's work and it's stunning."

They've also addressed other criticisms of the original game—some self-imposed—including the fact that *Deus Ex* couldn't be finished without killing anyone. Although Smith had mentioned that there's only one time in *Deus Ex* where you actually have to make a kill, Spector thinks there's more. "I thought it was three," he says. "But even if there was just one... On some *Deus* Ex forum, a player posted that he got through the whole game without killing anybody. We were like, 'Yeah, whatever, we made the game, we know.' And then he told us how he did it. It was unfun as hell, but it worked. So now I can proudly say you really can get through *Deus Ex* without killing

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It's still better to avoid than engage in Thief 3. Improved AI won't let you just hide in corners and observe guys chatting like these three. [right] The new and improved lighting is designed to produce effects even more natural than "actual" light.

anyone—as long as you're insane."

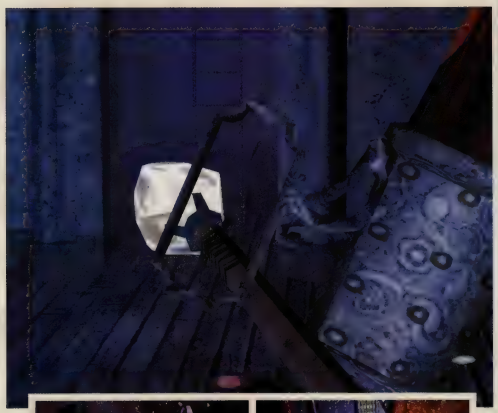
The game now supports an exclusively *Thief*-ian play style, although the gore when you do kill someone has been ratcheted up to be as realistic as possible (the designers agree that showing the consequences of your actions is imperative, and that games that don't are being irresponsible). Although much of the game's action remains nocturnal, *Invisible War* features a blindingly bright daytime Cairo setting with plazas and bazaars that, even at this stage, seem infinitely more vibrant and organic than the first game's memorably static, cubical Hong Kong maps. Other locations include Seattle (where you can bet on a cockfight between greasels), Antarctica, Triere in Germany, and "another place…secret." When asked how many levels there would be, Smith replied with a straight face, "In the forties."

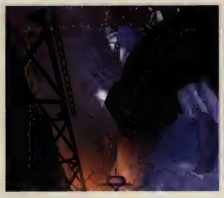
Besides JC, other holdovers include his brother Paul (gratifying for those who went to great trouble to save his ass in that hotel room), an artificially virile-looking Tracer Tong, and "two other key figures." Sadly, Jock, the Kris Kristofferson-like pilot, remains MIA even if you did save him from that bomb. Two new pilots replace him, both "very different."

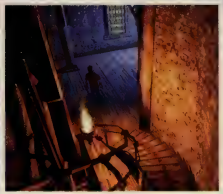
"UNATCO is a memory," says Smith, "but is touched on twice in really interesting ways. The NSF were absorbed by a new faction, and [the Mole People] will always be with us, in one form or another." Finally, they've upgraded the four-digit security codes strewn throughout every facility with five-digit codes.

Saying Little About Thief 3

First off, it won't be called "*Thief 3*." Lead designer Randy Smith, who worked on both previous games, says, "Its mood and vibe will match the dark, gritty brooding feel of [the original] *Thief* rather than glossy and domestic like *Thief 2*." He looks back on the second game as a frustrating rush job. "*Thief 3*'s story will be simple and powerful, less haphazard than *Thief 1*'s but not nearly as complex and brittle as *Thief 2*." Again you play Garrett, still voiced by Stephen Russell. The storyline completes the parabola begun all the way back in *The Dark Project*, involving Garrett's dealings with the complicated power structure of warring factions pulling the strings behind the scenes in the City. This time the focus is on the Keepers. "Garrett used to be one







of them," explains Smith (no relation to Harvey that they know of). "But he left them at an early age…and went on to become the most skilled thief ever known. [He] wants the Keepers to leave him alone, but his name keeps showing up in their prophecies…The Keepers consider it their responsibility to maintain the ancient balance between the Hammers, a group of fanatical priests who laid the foundations of the City long ago, and the Pagans, a cult of nature-worshippers." The Hammers and Pagans are both powerful groups with sinister agendas whose struggle, if left unchecked, could destroy the City. And they both hate Garrett, since he has this bad habit of making off with their sacred treasures and selling them on eBay.

A substantial amount of the plot will be exposed in-game rather than through cutscenes. Although the content is virtually identical in the PC and Xbox versions, the interface design is essentially very different. "Each type of control hardware has strengths and weaknesses, so the game tuning has to adapt," says Smith. "For example, mouse look gives PC players a big advantage in orienting and aiming over Xbox gamers, so we need to build in functionality to make it easier to aim on the Xbox. Garrett will also be sporting a new interface appropriately similar to the one in *Invisible War*, but needless to say, he already comes with all skills in place." He won't have GEP gun arrows this time around, but there will be an awful lot of new equipment.

The plan is also to make the AI search for you more intuitively. Old tricks won't work so

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Long forgotten are the blocky, low-res characters from the first two Thief games. Lead designer Randy Smith says the mood and vibe will match that of the original as opposed to Thief 2. But visually speaking, it's still a unique steampunk fantasy world.

predictably. This time, on their third go-around, the guards just might decide to look behind that pillar. "You can't just crouch in a dark corner and wait it out," says Smith. "If they're coming your way in their sweep of the room, you have to double back to someplace they already searched." The guards will also have a larger set of animations, such as lip-synced speech and dynamic location-based damage reactions.

Finally, the engine provides graphical possibilities hundreds of times more polished than the earlier titles. This, however, presents its own set of challenges. "Our old methods of building game content just don't work anymore," confesses Smith. The flip side is that, finally, games that rely heavily on shadowed environments will enjoy lighting effects that seem even more natural than "actual" light. Smith explains, "If you enter a room with light streaming in a window, you could try pushing a chair in front of it and sneak through the shadow cast by the chair." Sensing some impatience with AI and engine discussion, Smith finally demos an unfinished level. It showcases a giant steampunk clock tower contraption with pendulums and meshing gear-wheels. Nothing's functional yet (fire arrows plink harmlessly against a guard's helmet), but its intensely detailed look is strikingly similar to the earlier titles. A polished cutscene of a Keeper inscribing glyphs that begin to assume demonic life has such creepy dramatic power, that it reminds you what you liked about the series in the first place (scenes of creepy dramatic coolness, namely).

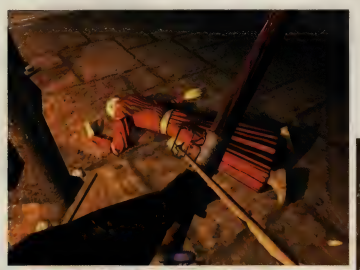
Thief 3 gives the impression of being a few months behind *Invisible War*. Naturally the designers squirm away from verbalizing release dates but Smith says that a year (from February) sounds about right.

Why Thief 3 Matters (more)

The most obvious distinction between *Thief* and *Deus Ex* is that Garrett can't fight. Or rather, on "expert," he's never allowed to kill anyone (humans or pets, anyway; 'mechs are fair game, although, in keeping with the

new storyline, there will be far fewer robots this time around in favor of a myriad of never-before-seen creatures). This forces you to pursue heights of ingenuity that no other game has yet inspired (arguably including *Deus Ex*). Deliberately triggering a horde of guards and taking them all down with a single gas arrow as they come crowding through a doorway, releasing an angry ghost from the library to clear the whole mansion for you, using unconscious bodies as lures to bring one patrol after another to just within blackjack range—these types of tactics will be common. Since *Thief*, "stealth" games have become one of the most ripped-off genres in town, and eavesdropping on comical "guard chatter" has become a staple of most terrestrial shooters. No other series, however, has come close to delivering quite the same bouquet of style, atmosphere, and, above all, player experience. Despite better technology and increasingly refined design, the Spector-related cyberpunk games progress in an almost stately wave-pattern: there are distinct echoes of *System Shock* and *Cybermage* in *Deus Ex*. You're constantly hunting down numerical security codes, you're a superhuman killer for a corrupt organization, your swords are blue, the world is grimy. *Thief* lacks *Deus Ex*'s philosophical depth, multiple endings, and (so far) character development, but it stands alone, silent, among the shadows, like nothing before it or since.

In the end, though, both games are concerned foremost with providing the most immersive experience possible, whether it's through advanced physics engines or embarrassingly simple bait-and-switch design tricks. In *Deus Ex*, when you tried to use the phones, you got what sounded like a chattering human operator. But if you tried again, the phone would emit a sinister droning noise that gave the impression your unauthorized usage had not gone unnoticed, and that you were now being tracked. Ingeniously clever? Spector laughs. "Smoke and mirrors, it's just smoke and mirrors." It's clever smoke and mirrors, though.



Much of the plot will come via in-engine cutscenes, and what's shown thus far illustrates the same level of creepiness the series is known for. (Inset) Despite all of the sneaking, there are times when the situation just calls for a well-placed arrow in the back.

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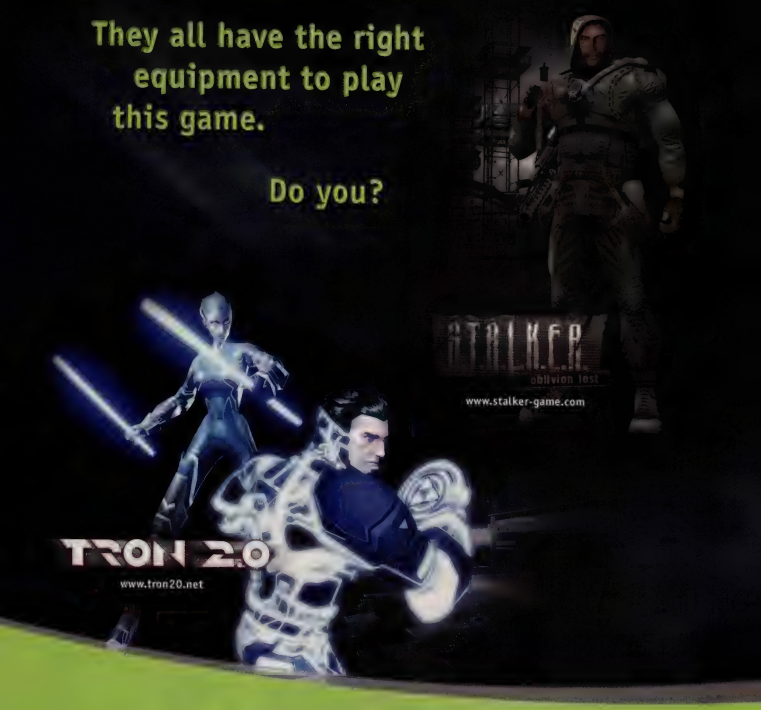
Do you?



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Lara Croft leading the London Symphony Orchestra in recording the score for her latest adventure, "Angel of Darkness."

DO YOU TAKE IN-GAME SOUND FOR GRANTED? MAYBE YOU SHOULDN'T. THE PAST HORRORS, CURRENT HASSLES, AND FUTURE TECHNOLOGY OF GAME AUDIO.

Lara Croft and company re-create the famous cover photo of The Beatles' "Abbey Road."

LISTEN UP!

BY CHRIS KRAMER In the summer of 1977, a bunch of 20-something audio geeks fanned out across northern California in a search of something that didn't exist. They went into deserts and hooked microphones up to high-tension wires and began tapping them with monkey wrenches, recording all the way. They took magnetic rods and stood in front of speakers waving them in a silly fashion just to record the feedback. And all of this was in service of one man: George Lucas. Legend has it that Lucas had finished his principle photography for *Star Wars* but was nowhere near complete with his unusual audio requirements for the film. Rather than wait, he showed a rough cut without music or sound effects to some film school friends. If the rumors are true, Brian De Palma laughed at it and Steven Spielberg furrowed his brow with concern; this was going to be a flop.

One year later, with the superb sci-fi sound effects *Star Wars* became a cultural cornerstone due in large part to its incredible visual and audio effects. Spielberg would recall the scene in an

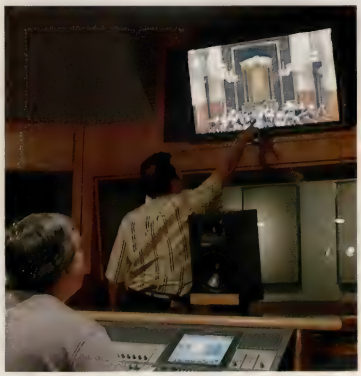
Jeff Kliment and Clint from LucasArts are seen busily tracking the recorded orchestral score to the action of "Indiana Jones and the Emperor's Tomb."

interview later, remarking on the importance of music in Jaws, and the impact tremor created by the T-Rex in *Jurassic Park*. But while film has enjoyed some truly spectacular aural achievements, its brother, the videogame, has been scrambling to catch up. There's good news for us gamers: little brother has finally caught up and is doing some cool stuff. Some PC games now have budgets in the tens of millions, surpassing even *Star Wars'* budget back in 1977, and games are growing faster than Mario hopped up on a funny mushroom. Audio is a big part of that growth, and it's just going to get bigger.

GAMERS, LISTEN UP!

Videogames have been desperately trying to be more like the movies since the early arcade days. Midway's *Spy Hunter* was an overt knock-off of the James Bond experience, and it wasn't exactly clear where *TRON* the movie ended and *TRON* the arcade game began. Jordan Mechner's 1986 classic *Karateka* used cross-cutting, accelerated time, and other staples of film editing to heighten the videogame experience.

But one area in which film continues to outshine videogames is technical advances in audio. Unfortunately, game makers have been much slower to embrace new audio technologies. There are several reasons why PC audio lags behind, but two of them feed on each other. One reason is



that it costs money to license technology like THX and Dolby Digital 5.1, and they're not cheap. The other reason is that kind of technology is only useful if there is a reliable chain of high quality hardware from "the source to the speaker." Why bother spending that kind of dough on quality audio when you're not sure what kind of sound card, cables, and speakers your audience has? And why should the gamer spend some cash on a quality speaker system or sound card if there are no games that reward his purchase? It's a vicious circle.

That's not to say game audio hasn't advanced at all. Brian Schmidt, Microsoft's audio program manager for the Xbox, goes back to the Neolithic era of video game design. "In the first game I did, you had to edit assembly language files by hand if you wanted to make sounds at all," he says. "Gradually, we started to make tools that allowed us to enter music as raw ASCII files. In early console games, memory was a premium, you couldn't grab large files, and little synthesizer chips generated everything. Over time, the storage medium of games became orders of magnitude larger. We went from cartridge to CD, floppy disc to DVD."

PLAYING SECOND FIDDLE

If sound is so vitally important that filmmakers are willing to invest millions of dollars and man-hours into the aural component of their films, why don't videogame developers make that same commitment? "There are a lot of reasons why audio doesn't get the same attention as 3D graphics," says one anonymous audio engineer working on a high-profile title for Electronic Arts, "and a lot of those reasons are dollar bills."

"When I started, audio was the very last thing on the list to do," says Tommy Tallarico, one of the preeminent, and most recognizable (thanks to a wardrobe of gold lamé jackets) music and audio composers working on games today. "Audio guys were screaming at producers, saying, 'Look, this isn't post-production.' In a movie, the last thing they do is audio, cutting music and sound effects to match scene, but from Day One of game design, you have to map out how the audio is going to be handled, before a line of code is even written."

"Over the last ten years, audio was always thought of as last thing you do in game, but it's not," he says. "There's still a lot of old-school thinking out there. Every day, we have this argument with producers or publishers, saying, 'Look, we need more money to do this, to hire orchestras or musicians or real actors.' In order to compete in this marketplace, you're going to have to make your audio great. You're going to have to spend $250,000, you have to hire real actors, you can't have your golfing partners kid do all your music or your secretary do some voices anymore."

Renting professional recording studios and the musicians it takes to fill them can easily run over six figures per week. And even if you decide to trim a little and have an in-studio recording room with a single com-

Audio Done Right

More and more game developers are spending the time, effort, and dollars to produce the type of audio experience that goes far beyond the same sampled exploding barrels and machine gun fire that have become the norm. We asked a few of the industry's top audio moguls to send out a few shout-outs to games that have really nailed the audio in the past few years.

TOMMY TALLARICO Tallarico Studios

Eternal Darkness (GameCube) "Eternal Darkness will scare the shit out of you because of the sound." **Halo** (Xbox) "Just for the sheer massive amounts of audio and the way music was handled." **Medal of Honor: Allied Assault** (PC) "All of the sounds and energy that went into the production of the game was amazing." **Madden 2003** "Madden games always sound great on the sports side, they (EA) always do sound right." **Unreal II** (PC) "The amount of sounds we put into it is amazing."

BRIAN SCHMIDT Microsoft

Halo (Xbox) "One of the reasons [it] sounded so good is that the audio team was involved from day one, rather than bringing in a team three months before ship." **Thief** (PC) "Thief did a really good job because sound was integrated into the game really well. Players could do better if they actually listened to the game." **Black & White** (PC) "[It] had really great sound."

TODD SIMMONS Ion Storm

"I'm a fan of Japanese rhythm games. **Vib Ribbon** (PSX) is really interesting and **Rez** (PS2) is a good example of music integration in a game. The **GTA3** radio stations are funny and somewhat realistic. **Thief 1 and 2** good example of (use of) sound effects."

ALEX BRANDON Ion Storm

Thief "Really great use of technology and audio production." **WarCraft III** "Music and sound effects work in the game. Overall, the audio design is done very well."

JEFF KLIMENT LucasArts

"**Medal of Honor**, **Halo**, the **Myst** series. Even some racing games, like **SSX: Tricky**, have great soundtracks."

poser, there are other expenses that gamers have come to expect. "Back in the '80s," says one audio producer, "some of the developers would do their own voice talent, because after all, who cared?" Today, critics and gamers demand at the very least professional voice actors, and some studios even get celebrities. *SSX Tricky* used actors such as Lucy Liu and Oliver Platt to bring some color to the game, and *Grand Theft Auto III* used such veteran character actors as Joe Pantoliano, Michael Rappaport, and Kyle MacLachlan.

But the economic realities of licensing and recording are only part of the reason audio isn't given the same importance as graphics in a videogame. One of the most difficult aspects of producing videogames is convincing retailers that they should stock their shelves with your title. This sort of a song and dance is often done months before a game is finished, when advertising campaigns are just starting to gather some publicity. Retailers are shown a demo of the game, usually in less than ideal conditions for good sound quality, and they are shown screenshots, box mock-ups, and whatever press coverage the game has gotten so far.

"Audio gets a lot closer to something 'acceptable' with a lot less technology than is required for graphics," says Schmidt. "Basic playback and recording gets you a lot farther than does an analogous part of video. At the end of a project, the manager is looking to get product on the shelf. A crash bug is higher priory than tweaking the volume of a gunshot. A month before shipping, it may be a choice between either spending time tweaking audio or going back and fixing a level."

"In the past, audio could be done by one guy or even the programmer of game," says Alex Brandon, the audio director on *DX 2: Invisible War*. "We're now at the point where it's becoming vastly more specialized. Directing voice-acting is a major task, especially for a project like we're working on, with over 30,000 lines of dialog. It's hard for some producers to see how much additional value comes from adding people and resources onto the audio team in a project."

TAKING AUDIO FORWARD

Most audio producers in the game industry recognize that sound isn't always given the respect it deserves, but not everyone feels that audio is the redheaded stepchild of game production. Jeff Kliment, the sound department manager at LucasArts, is coming from the opposite direction. "I think sound and music get a lot of attention in games, and it's definitely true at LucasArts," he says. "I think developers are paying much closer attention to audio, and people are definitely listening. I'm really lucky because LucasArts has always placed a lot of emphasis in sound production and good sound; I'm really fortunate, but we're not the only ones doing it."

In order to help promote the proper placement of audio in game design, Tallarico and a group of dedicated audio engineers, composers, and game producers have banded together to create GANG—the Game Audio Network Guild—formed for the purpose of promoting excellence in interactive audio. "In order to do that, you need to do great audio, since we all learn from each other, but we also have to spread the word to developers, publishers, designers, and programmers. We need other guys who work on the games to know how important audio is as well. The goal is to get everybody involved and every day, the numbers are growing more and more." (For more information, visit the groups website at www.audiogang.org)

Alex Brandon agrees. "With all the advanced graphics terms being discussed every day—shaders, T&L—it's up to us audio designers to talk about the advances in audio. There's just as much room for audio rendering to move forward."

Everyone spoken to about audio design in games expresses the same opinion: the audio guys must become more involved in the production cycle of a game. Todd Simmons, a sound designer at Ion Storm, thinks that audio people need to be included very early in process of the game, right from the beginning. "Designers and producers need to be open to that kind of input, such as altering aspects of game design on recommendation from the audio lead, rather than having audio be the 'icing on the cake' in the post-production process. Audio teams need to have a good understanding of the game to learn how to make the game better and not just glorify the sound effects."

THE FUTURE OF PC AUDIO

Sadly, the grand mages of PC audio say that we are still a few years away from happily plugging cables into our bodies like they do in *anime* and David Cronenberg films. Until then, we are stuck with experiencing the wide world of sound through our ears. But don't despair; there are some cool things on the way for them.

CODECs (coder/decoders) may not be "cool." but recent advances have allowed for integration between the audio chip and the central processing chip. In recent years, companies such as Analog Devices have been working on an integrated CPU/sound core that provides higher fidelity music at a faster rate with much

Dude, it's all around us!

In the 1970s audiophiles took their first stab at something like surround sound. Quadraphonic sound was an attempt to add more information to the two stereo channels vinyl LPs could reproduce. This was usually done through a complicated engineering technique that modulated the relative phase of the signal sent to the two extra speakers. It was expensive and ineffective, and like orange beanbag chairs, brown shag carpet, and Alan Parson's career, quadraphonic sound became yet another embarrassing relic of the '70s.

In the early '90s surround sound audio became a reality, and with it came a much more immersive audio experience. Although hearing does not give you the positional awareness that sight does, we subconsciously use sound to locate our spatial relationship to our environment. Low frequencies are considered omni-directional—that's why you can put your subwoofer just about anywhere—but mid-range frequencies can be perceived as happening above, below, and all around you, adding more realism to the experience and fueling the boom in DVD and home theatre sales.

less technical hassle. Imagine what it will be like to hear 256 discreet sound channels recorded at high bit-rate pouring out of high-end surround sound speakers. And it will happen without having to think about it or ruin your eyes trying to readjust your jumpers with fingernail clippers. Better yet, this high-class audio will happen without the need for an add-in sound card, as new systems like the SoundMAX Digital Audio System are part and parcel of new motherboards.

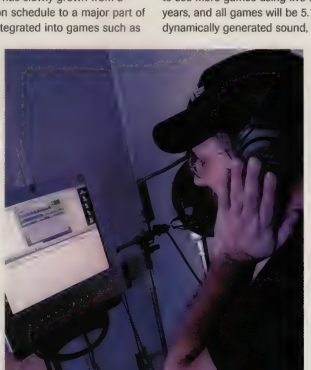
Over the last decade, audio design has slowly grown from a last-minute line item on the production schedule to a major part of the game. Look at the way audio is integrated into games such as *Medal of Honor: Allied Assault*, and you'll see that budgets for production have expanded dramatically, ringing in anywhere from $100,000 to $200,000 dollars on bigger titles. Jeff Kliment recently returned from a trip to Seattle, where he was recording the orchestral score for the upcoming fifth Indiana Jones game—which he promises will have a "dynamite" score—and Eidos worked with the London Symphony Orchestra to create the soundtrack to *Tomb Raider: Angel of Darkness*.

For Brian Schmidt, the future should hold greater control over the generation of sounds. "I'd like to see more parametric control of sounds. Take a sound of a gunshot, for instance. I could apply a filter to make it sound like it's behind a wall, or brighter and more in-your-face. Complementary is the idea of sound environments: if I shoot a gun in an open field, it sounds one way; in a hallway, it sounds more cavernous. In true physical modeling of sounds, there is no airplane, we simply use a magic process to generate the sound of an airplane, allowing me to tweak its speed, engine sound, damage."

Jeff Kliment sees the future of audio development as a series of steps. "It just comes down to basics: more memory equals more bandwidth, which gives us better streaming capabilities. I'd like to see high-resolution audio, Redbook (CD quality) at least. Gamers have slowly been moving away from cheap multimedia speakers, and either integrating their game station into a home theater setup, or buying better hardware from companies like Cambridge SoundWorks. If we have all those things, we're golden, we can produce a pretty good soundtrack."

For Todd Simmons, there are a number of different aspects of audio that will hopefully change in the coming years. "Music needs to become more interactive, more adaptive. We still have a long way to go in that realm; a lot of that is because people haven't gotten used to writing music in the interactive sense. Sound effects need to be used in more abstract, symbolic ways. *Thief* is a good example of that, as there are lots of sounds that are in the background that aren't necessarily tied to the action. Sound effects also need to be used in a more artistic way, to help tell story and further narrative in a more interesting way, or used to enhance the mood."

Tommy Tallarico has a broader wish list. "I think that you're going to see more games using live orchestras over next year to two years, and all games will be 5.1 compatible. You'll be seeing more dynamically generated sound, which tools like SoundMAX are great for. Someone also needs to create a system that dynamically allocates real-time environmental reverb based on the space and surface texture of a room."



Voice talent in Ion Storm's isolation booth, performing in-game dialog as scripted from a flat-screen LCD.

"There is going to be a point in which game audio isn't trying to sound realistic; instead, we're trying to make it sound unique," says Alex Brandon. "There's going to come a point very soon where game producers are going to think, 'Our games are sounding like movies, they need to sound more like games.' Movies are linear entertainment experiences—whatever the creators want is what you see and hear. With games, the user has a great deal of input. As a result, that gives sound designers difficulty and flexibility as well. Games are not so linear, and any numbers of designs can be used for any numbers of games."

LITTLE BROTHER

There is no art form today with more swagger than film. Videogames, however, still have a lot of ground to catch up if it wants to hang with the big boys. Part of that catching up has to do with offering the same sort of visual and aural experience that film can.

Games are slowly getting there. They get bigger budgets partly because publishers want to appeal to the general consumer, and not just their 14 year-old kids. With that older, savvier audience will come an increasing demand for high-end audio. Smart companies such as Intel, Creative Labs, NVIDIA, and Analog Devices are already positioning themselves to deliver to that growing market. Brian Schmidt has a perfect observation: "Audio won't make a bad game great, but it can make a great game better. Bad audio can definitely make a good game less fun."

To learn more about the latest high end audio breakthroughs, check out the websites for Analog Devices (www.soundmax.com), Intel (developer.intel.com/design/motherbd/audio.htm), NVIDIA (www.nvidia.com), and Creative Labs (www.creative.com).

Another day, another warehouse. [below left to right] Red team, move out and make snow angels; Red carpet treatment, Rainbow Six style.

Downing Tangos Since 1998

Into the fray with Tom Clancy's **Rainbow Six 3: Raven Shield**

★★★½

BY TOM CHICK

"A COLORFUL COALITION... Something phallic on the loose..."

"Um, things you'd find on a bus? Things your mother told you not to play with?"

"A bird repellant..."

"Things you take on a camping trip?"

If you're enough of a fan that you guessed "titles of Red Storm's first person shooters", then the names *Rainbow Six* and *Rogue Spear* probably roll off your tongue with nary of thought for how silly they sound. You also probably know they're not just first person shooters; they're team-based close quarters counter-terrorism tactical combat sims with token character development and goofy Tom Clancy back stories spelled out in the briefings you probably don't read.

You might also know that the latest iteration, *Raven Shield*, was developed by an entirely new group. UbiSoft passed the creative torch to its developers in Montreal, which could be a cause for concern. What do a bunch of Canadians, much less French-Canadians, know about these kind of paramilitary operations?

Quite a lot, it turns out. One of the most pleasant surprises about *Raven Shield* is how fitting a follow-up it is to Red Storm's five-year-old series. From the moment you hear that distinctive warble when you press a button in the shell screen, you know you're in a *Rainbow Six* game. UbiSoft's Montreal studio has done some great work capturing the series' look and gameplay.

Using the *Unreal* engine's considerable power to convincingly create real-world locations, the dozen or so maps globe-trot obligingly, although most of them feel like variations on a warehouse. There's nothing memorable like the space shuttle gantries or cruise ships from the previous games. There are elaborate character models and animations, but someone took the name of the "rag doll" physics too much in earnest; when people get shot in *Raven Shield*, it appears by the way they fold over that their skeletons have been knocked right out the their bodies. But even with a bunch of boneless corpses in warehouses, there's no denying this is great looking game.

The rising stars here are the new weapon models. They do a wonderful job of finally breathing life into the weapons, which used to be a bunch of invisible stats behind a reticule. But *Raven Shield* gives you a big honkin' gun, quite literally up in your face. At last, it's all very visual and very visceral. The loadout screen displays attributes for each gun, modified as you fit them with silencers or scopes. You no longer have to guess whether the G3A3 is better than the G36K (it's not). There's still no gameplay incentive to use the less effective weapons, but at least you might want to try them now to see how they look. There are new less omniscient heartbeat sensors, useless night vision goggles, and useful flashbangs, smoke, and gas grenades. Smoke is finally effective and thermal sights let you look through walls. With the fluid movement options, you can lean as an analog movement and open doors in increments. This allows for careful peeking and gratifying tricks like cracking open a door just wide enough to roll in a grenade.

There are three ways you can play a *Rainbow Six* game: as a tactical planning sim, as a single-player first person shooter, and as a multiplayer game. As a tactical planning sim, *Raven Shield* seems at first glance to be an improvement. The 2D planning map includes a viewpoint for a 3D window. This lets you easily relate the flat map to what you'll actually see when you play the level. But when it comes down to the actual planning, it tends to err on the side of simplicity. Some of the waypoint orders from *Rogue Spear* are gone. Without precise control over the details of our plan, there's a lot of "pray and play": there's little you can do but hope the friendly AI gets the drop on the enemy AI. The annoyingly precise AI aiming, a trademark of the series, means you'll rarely get into extended firefights. Instead, team members die instantly. With the recording and replay function no longer included, there's no way to go back and check what happened when your plan fails. All told, *Raven Shield's* tactical planning has been so simplified that it's ultimately frustrating.

Do you think we'll make it through airport security?

But as a partial solution, it's now much more viable to play the levels on the fly, approaching *Raven Shield* as a single player first person shooter in which you lead an AI team. Taking a cue from Sierra's *SWAT 3*, there are context sensitive commands based on where you point your cursor. There are only a handful of orders basically restricted to running and gunning, but this lets you command your men as you go. It doesn't work very well if you're trying to switch between more than one team and the friendly AI will still do some bewilderingly dumb things. But it's one of those "about damn time!" features, because it lets you enjoy *Raven Shield* as a team game without having to plod through the planning screen.

Finally, the *Rainbow Six* games have always been a unique multiplayer experi-

ence, out-*Counter-Striking Counter-Strike* for their realistic portrayal of lethal weapons. With solid netcode, short sharp snappy rounds, and game modes that focus the action without limiting it, this is punishing lethal gunplay at its best. The pace is a little pumped up since *Rogue Spear*, perhaps in an attempt to lure action-oriented gamers. With a direct line of communication with another player, either by being on a LAN or through third-party real time voice communication, nothing compares to a multiplayer co-op game against computer-controlled terrorists. Unfortunately, UbiSoft requires that each player on a LAN purchase a separate copy. Furthermore, the copy protection continually polls the drive for the presence of the CD, multiplayer matching is limited to ubi.com, and there have been persistent problems with fussy authentication servers locking players out of games. *Rainbow Six* was always an exceptionally accommodating multiplayer series; *Raven Shield* reverses that trend.

But it's a testament to the core gameplay that *Raven Shield* can shrug off most of these problems and still end up as good as it is. And after introducing so many of us to the Heckler & Koch MP5 five years ago, it's about time that we can actually see the darn thing.

DEVELOPER/PUBLISHER UbiSoft
ESRB Mature

Doing the rag doll twist.

IL-2: Forgotten Battles

The Gathering Sturmovik

★★★★½

EDITOR'S CHOICE COMPUTER GAMES

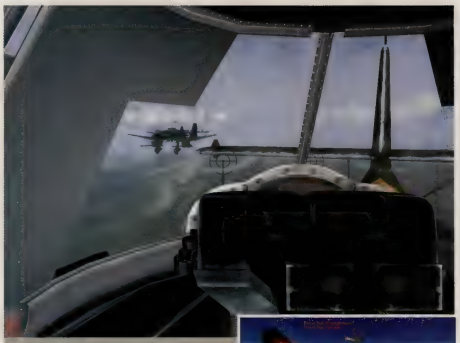
WHO WOULD HAVE expected that the first simulation from an unknown developer, focusing on planes most Americans have never heard of, would be hailed by many as the "best sim ever?" Yet many gamers bestowed just such accolades on 2001's *IL-2 Sturmovik*, a sim that boasted convincing realism; an unprecedented fleet of detailed, flyable aircraft; and next-generation graphics. Despite all that, its reign as king of the hill was short-lived; it's been usurped by its offspring, *IL-2: Forgotten Battles*.

Originally planned as an expansion disc, *Forgotten Battles* grew into full-blown, stand-alone sequel. Having already made himself a "Hero of the Simulation Union" by releasing patches that added 20 new planes to the original *Sturmovik*, developer Oleg Maddox must be pushing to have a city renamed "Maddoxgrad." *Forgotten Battles* includes all of the features of *IL-2*, but forgoes its mediocre, scripted campaign missions for a new, dynamic campaign engine that lets you fly pilot careers for the Soviet Union, German, and (we know you've all been waiting for these) Finland and Hungary. An additional 20 scripted single-player missions and 10 multiplayer scenarios, as well as an enhanced quick mission builder, round out the play choices. New maps provide additional scenery variety, from frozen lakes in Finland to a mountainous multiplayer arena.

A few holes in the wings don't deter a P-47 "Jug" pilot.

It adds 36 new aircraft to the roster of 79 planes available in its predecessor. You can fly a staggering 80 of these (many are variant models—there must be a dozen versions of the Bf-109), including the He-111 and TB-3 bombers (complete with gun stations you can jump to in combat). You'll find more "Made in America" plaques here—the P-40, P-47, and Brewster Buffalo highlight the additions. Each aircraft is modeled with a loving attention to detail, with accurate 3D cockpits and a positively anal-retentive level of systems simulation. Want to deal with engine management tasks such as fuel mixture, propeller pitch, and manual supercharger settings? You can. Handling the minutia yourself is optional, though, and a large selection of realism toggles makes the sim accessible to casual fliers as well as the hardcore.

With this level of modeling detail come



[above] "Stuka tail gunner" isn't usually a long-term job. [right] An Me-210 meets its demise.

significant challenges. For example, the 30 cal. machine guns on the newly added Hawker Hurricane are so authentically weak that, against some planes, your only hope for victory is to try to aim for the cockpit to kill the pilot. Learning to use the lumbering TB-3 bomber's bombsight is a challenge as well; be sure to check the additional documentation on the CD for guidance.

Forgotten Battles' most significant improvement isn't evident until you've been in a few heated battles. The AI in the original had an "Ernest Goes to War" quality at times, as its actions were unpredictable, occasionally amusing, but often stupid. Pilots would circle AAA guns till they were shot down, or keep fighting while riddled with holes and pouring smoke. The new pilots are smarter, making for more challenging—and more convincing—air combat. That's not to say the AI is perfect. Bombers sometimes try fighter-like evasive maneuvers, and pilots attempting to belly land have a talent for putting their planes down in the center of the only forest within 20 miles. On the other side of the coin, tail gunners have an uncanny knack for accuracy, making bomber attacks unrealistically challenging at times.

Despite the flight sim community's elevation of Maddox to near-sainthood, *Forgotten Battles* still offers plenty of room for improvement. Campaign missions remain a sterile environment, with somewhat spotty action. You'll rarely encounter much activity that's not directly related to the mission at hand—there's little sense of the immense scope of the war on the Eastern front. The human element is lacking, as well—that guy who got shot down flying on your wing is just an anonymous Joe (or Ivan, as the case may be). How about the ability to name your squadron mates and track their progress? And while we're glad the AI has gone back to flight school, it still exhibits enough suicidal tendencies and odd behaviors to occasionally ruin suspension of disbelief. Most crippling to gameplay is a padlock that loses track of enemy aircraft far too easily—a feature limitation implemented to satisfy the demands of the vocal, ultra-hardcore armchair pilot crowd that feels situational awareness aids are "cheats."

In the end, *Forgotten Battles* is more an improved "IL-2: Sturmovik 2.0" than a new game. But as fans of the original can attest, that's not a bad thing at all. *—Denny Atkin*

DEVELOPER 1C: Maddox Games
PUBLISHER Ubi Soft ESRB Teen

top sellers

Exploding Menus

In these times of war and general uncertainty, people want to blow off some steam by blowing stuff up. **Command & Conquer Generals** vaults to the top of the charts in February. And Master of Orion III made a strong debut, despite less-than-stellar reviews.

1 **Command & Conquer Generals**
Electronic Arts ★★★½

2 **Battlefield 1942: Road to Rome**
Electronic Arts ★★★★

3 **SimCity 4**
Electronic Arts ★★½

4 **Unreal II: The Awakening**
Infogrames ★★★

5 **Ultima Online: Age of Shadows**
Electronic Arts Not Rated

6 **The Sims Deluxe**
Electronic Arts Not Rated

7 **The Sims Unleashed**
Electronic Arts ★★★½

8 **Master of Orion III**
Infogrames ★★

9 **Battlefield 1942**
Electronic Arts ★★★★½

10 **Tom Clancy's Splinter Cell**
UbiSoft ★★★★½

11 **Zoo Tycoon**
Microsoft ★★★★½

12 **RollerCoaster Tycoon 2**
Infogrames ★★★★

13 **Medal Of Honor: Allied Assault Spearhead**
Electronic Arts ★½

14 **NASCAR Racing 2003 Season**
Vivendi Universal ★★★★½

15 **Age of Mythology**
Microsoft ★★★★★

16 **WarCraft III: Reign Of Chaos**
Vivendi Universal ★★★★

17 **Age Of Empires II: Age of Kings**
Microsoft ★★★★★

18 **The Sims Vacation**
Electronic Arts ★★★★

19 **Sponge Bob Square Pants: Operation Krabby Patty**
THQ Not Rated

20 **Harry Potter & The Chamber Of Secrets**
Electronic Arts Not Rated

Source: NPDTechworld. This February list is based on units sold by more than 70 chains/ partners, representing 80% of the U.S. retail/consumer market.

Galactic Civilizations

Less Flash, More Substance

★★★½

GOVERNING THE TERRAN Alliance is never easy. Take today: a group of rogue scientists, acting secretly and without your administration's knowledge, has discovered a way to resurrect the dead. They call the project "The Undead Warrior," and their findings suggest that although these zombie super soldiers would lead a horrible and tortured existence, they could significantly increase the effectiveness of your army. Revolted by the idea, you have the scientists arrested and their research destroyed. Your decision will have a chilling effect on future scientific research, but you press on. In a sprawling galactic empire, tough decisions come with the territory.

In a game about building a sprawling galactic empire, tough decisions also add strategic depth and character—two qualities that *Galactic Civilizations* has in spades. Random events add flavor and force you to make strategic trade-offs. "Advanced Slavery" is a research option only made available to players that demonstrate a certain moral flexibility, for instance. Periodic meetings of the United Planets offer you the opportunity to vote on galaxy-wide laws that alter the rules for everyone. The galactic map is littered with space anomalies that grant bonuses when you visit them, providing a strong incentive to explore. Space monsters, plagues, economic recessions, rogue terrorist nations, and dozens of other assorted crises add variety and breathe life into the setting.

[upper left] Early in the game there is a rush to build starbases on every available resource. Here fleets of Constructors from nearly every race in the game make a grab for the last available resource on the map. [above] Power in the United Planets helps you keep other races from passing galactic laws designed to screw you over.

The game doesn't reveal its hand all at once. It seduces you with its simplicity and trickles the good stuff out over time, makes each game a little bit different than the one before, keeps you coming back for more. From the moment you choose your political affiliation in the game setup screen, every choice you make has long-reaching consequences that require different strategies. There are multiple paths to victory, and multiple ways to follow those paths, and an ever-changing set of obstacles along the way.

To its credit, it doesn't overwhelm you with all of this right out of the gate. The basic mechanics are simple, and there's a remarkable sense of focus. Anything that takes you away from the business of running your empire is simplified or abstracted out of the game entirely. The opening video tells you that this is the story of how the human race became a galactic civilization, and the game sticks to its guns. You can only play the human race—the AI plays each of the six major alien civilizations, each with its own distinct personality. Combat is simple and streamlined. There is no multiplayer mode.

The game has a few things that it would be better off without: some minor bugs, interface oddities, spotty documentation, the sorts of things you'd expect to see in a game from a small developer. You'll want to overlook these problems, not because games from small developers deserve special treatment, but because the meat of the game is so good that it seems a shame to let a few rough edges spoil the experience.

The game never uses a complex system when a simple one will do. Your entire galactic economy—an intricate web of trade, taxation, and planetary production—is controlled by a couple of sliders. One slider sets your tax rate, a second one sets your spend rate. Three additional sliders let you adjust how much of your spending goes to military production, social production, and research, respectively. You can ignore all of these sliders until you better understand what to do with them—a consistent defining trait of all of the game's more intricate details.

It takes about fifteen seconds to learn

[above] Uhm... there's something you don't see every day. [left] If you make consistently good or evil choices, the interface eventually changes to reflect your demeanor.

how to manage your empire's economy; learning how to manage it effectively is another matter entirely. A short list to the right of the sliders summarizes your income and expenses. Keeping your bottom line in the black is a delicate balancing act. Trade routes give you free income, but they help your opponents as well. Lower spending and you slow down production and research. Raise taxes and you lower morale throughout your empire; average morale is listed as a percentage just below the taxation slider, and you can watch it go down as you ratchet up your tax rate. You can combat low morale by building improvements such as Entertainment Networks and Harmony Generators on individual planets or by launching propaganda campaigns, though each of these options increases your spending. Let your morale get too low, and your political party might lose control of the Senate (which means that you lose whatever bonuses your party affiliation grants you), or planets might secede to join another empire, or rebel and form a new confederate alliance.

Galactic Civilizations is filled with simple systems that interact in complex ways. This is what good strategy is all about.

Good strategy is also about strategic challenge, and it has that as well. The developer, Stardock, claims that the AI does not "cheat" by starting with extra resources or advantages unavailable to the player. It may well be true. It does not take long to realize that the AI is much, much better at running an empire than you are, and the game can be tricky to beat even at the "sub-normal" difficulty setting. At lower levels the AI is less adept at formulating long-term strategies, so swallow your pride and crank the difficulty down to "Beginner" until you learn the ropes.

One nice side effect is that you can improve your skills by watching what the AI players do. Notice how the AI players always seem to have entire convoys of Constructors (expensive ships that build starbases) before you have even completed your first one? Perhaps you should try boosting your military spending in the early stages of the game.

Galactic Civilizations is designed for the long haul—it gets better the more you play it. It's an understated, thoughtful game that is highly replayable and continually challenging—the sort of game that will still be on your hard drive when all the other games you are playing right now are gathering dust on a shelf. And really, what more could you ask for? —*Benjamin E. Sones*

DEVELOPER Stardock PUBLISHER Strategy First ESRB Everyone

now playing

Michael Stemmle
LucasArts

I'm playing a lot of SimCity 4 these days, mostly for therapeutic reasons. I'm afflicted by a neurotic love of numbers, patterns, and formulae, and if I don't indulge that obsession every now and then, it starts creeping into my adventure games... and no one wants that.

Demis Hassabis
Elixir Studios

I've been playing a lot of Command & Conquer Generals. The amount of complete destruction is terrific. We also play a lot of Return to Castle Wolfenstein on our LAN, more than any other game, in fact.

Devastation

Resistance is Futile

★★½☆☆

DEVASTATION is a team-based first person shooter that takes place in a bombed out future run by an evil corporation bent on world domination (now where have we heard that before?). As you progress through the story in the single player game you add more and more people to fight along side you in the aptly, if not originally, named Resistance. At this point, anyone that struggled through the utter madness which was *Daikatana*, with its moronically masochistic sidekicks, is crying out in horror, "Oh dear god, not again!" and running screaming from the room at the mere thought of playing another game where the main goal degenerates into babysitting your brain-dead teammates.

Fortunately, you can cast aside those fears. With the exception of a few early missions, protecting your comrades is a non-issue. The plot of *Devastation* revolves around replication technology, and once you get the corporation's "spawners" working for you, your team is free to run blindly into enemy fire and play hot potato with live grenades. And they will. Repeatedly. But thanks to the miracles of post-modern technology, they're safely resurrected at the nearest spawner under your control in only a few seconds, good as new, and ready to go running off to their deaths once again (or twice, or three hundred times…).

However, being relieved of the obligation of safeguarding your team doesn't necessarily make their antics any more palatable. Through most of the 22 missions that make up the single-player campaign, your main objective is taking out the enemy spawner, and you will need the help of your team to do it. For those who have played multiplayer games like Assault or Capture the Flag with teammates who refuse to cooperate and generally run around like deranged monkeys, this is nothing new.

[above] He says he's following, but is he really? [left] The spawning screen. You'll see this a lot.

While you can give your team some orders, the results are woefully inadequate. The four commands–attack, defend, follow, and hold–are barely obeyed, and only until the enemy is spotted; at that point, they default back to monkey time. It can be extremely frustrating when you need them to cover you while you download codes or deactivate an enemy laser fence, tasks which are required to complete almost every level. But the real highlights are when they sometimes walk into lasers or burning cars until they die. Go team!

That aside, and it's a pretty big aside, *Devastation* neither wows nor woes. Running on a foundation of *Unreal* engine technology, its graphics are solid. The world has a gritty, punked-out look of some place that is in big, big trouble and could use a lot of saving by the good guys. The lighting and particle effects fall short of stunning, but land safely in the plus side of the spectrum. Friends and foes alike are nicely modeled, though everyone runs oddly, like they have a load in their pants. The usual subjects of weaponry are all there–pistols, shotguns, rifles, etc–with plenty of variety and two-fisted John Woo action to go around. A few extra sci-fi surprises from *Devastation*'s near-future setting round out the arsenal, like the sneaky rat-bomb and incinerating P-Laser.

Devastation is a game that seems to suffer from confusion as to what it wants to be. Single-player mode feels so much like playing a multiplayer game with a bunch of your dumbest "friends" it makes you wonder if it really wants to be a single player game at all. Playing online is adequate, but nothing that hasn't been done before and better. There is also a feeling that *Devastation* seems to want to be a strategy-shooter hybrid, but the tools just aren't there. There's no tactical map, no way to give more complicated orders, and no reasonable sense that they'd be followed anyway. What's left is an experience that while extremely intense, is difficult for all the wrong reasons and ultimately more frustrating than genuinely enjoyable. The thrill of finally overcoming it all and completing a mission quickly wanes when you realize that the next mission is just more of the same in a different playpen. Only those truly desperate for a new shooter should enlist in this rebellion. *–Adam Fleet*

DEVELOPER Digitalo Studios PUBLISHER Arush Entertainment ESRB Mature

[clockwise from top] When a sheepdog can't get the job done; Don't forget to chew your food; My, what a long neck you have!

Jurassic Park: Operation Genesis

The Thereness of Dinosaurs

★★★☆☆

MICROSOFT'S *ZOO TYCOON* had a dinosaur expansion pack, which let players exhibit them in their own Jurassic park. What it failed to capture, and what *Jurassic Park* is all about, is the "thereness" of dinosaurs: the awe of one of them being right there, in front of you, moving, breathing, eating. *Jurassic Park* is about restoring presence to these extinct terrible lizards.

Although *Operation Genesis* doesn't have a lot of game to it, it knows this. The dinosaurs are the main attraction here, rendered in 3D before your free roaming camera. They lumber around, scratch themselves, sniff the air, drink from ponds, roll on their backs and kick their legs in the air, and, yes, they eat. Because let's face it, that's what you really want to see. Not the herbivores grazing, but the carnivores lunging at their prey, shaking it like a bulldog with a rag, the blood, the screaming, the sound of crunching bone. Come to think of it, maybe you don't want to see all that, but it's here and it's part of the "thereness" of dinosaurs.

Although the presentation can be a little chintzy, *Operation Genesis* doesn't sanitize the feral nature of its dinosaurs. You know you want to set one loose in your park. People holler and run, the dinosaur eats one or two visitors, and then it loses interest and goes off to get something to drink before taking a nap. Okay, it's a little anticlimactic and ultimately peripheral to the game, but you have to try it.

Operation Genesis is about researching different dinosaur species and dropping them into habitats. Both you and your park's guests watch them from platforms, towers, balloons, and safari trucks. Running behind all the watching is a thin game in which you manage your park and a team of scientists trying to get DNA for more and better dinosaurs. You research things like benches and dino flu vaccines. You hire cleaners who keep your paths from turning brown, which represents dirtiness, and make sure the automatic dino feeders are set to automatic. It's so forgiving as to be almost apologetic, as if it knows it doesn't quite make for a full-blown strategy game, but it had to give you something to do.

As a separate part of the game, there are a dozen challenges that range from the slightly disturbing (gun down dinosaurs with your sniper rifle from the safety of a helicopter) to the slightly annoying (herd a bunch of dinosaurs through a maze and watch out for the hungry raptors). Once you finish them, which should take less than an hour, you've unlocked a sandbox mode in which you can let loose on an island any dinosaurs without the park management stuff to get in the way. Want to know who would win in a fight between an Allosaurus and a T. Rex? Play the dopey little missions and then you can find out.

Considering the thin gameplay and locked content, it shouldn't be any surprise that *Operation Genesis* is a console port. It shows in the interface, with minimal buttons, big Stone Age font text, and ridiculous truck and helicopter physics. The camera can be a bit of a pain, sliding around wildly when all you wanted to do was click the little button to check your email. The console development, specifically since the Playstation 2 is its base system, is also why the 3D engine feels so compromised. The models have low polygon counts, the animation is stiff and limited, and the collision detection is completely botched.

But there are still plenty of fancy effects, like flocks of birds, reflective water, and swaying trees. The terrain and textures look great, and although they can be simple, most of the dinosaur models look great. They sound even better, with distinctive chirps, barks, groans, and wails. The developers at Blue Tongue understand that this is less about building enough restrooms and more about the "thereness" of dinosaurs, seeing them and hearing them, watching them. And because they understand this so well, *Operation Genesis* manages to earn what might be faint praise, but is nevertheless true: it is better than any other *Jurassic Park* game you've played. —*Tom Chick*

DEVELOPER Blue Tongue Software
PUBLISHER Universal Interactive • ESRB Teen

IGI-2: Covert Strike

Frustratingly Entertaining

★★★☆☆

LIKE A LOT of contemporary and "realistic" gaming protagonists, David Jones, the hero of the *IGI* series, is a gruff, down and dirty version of James Bond. He's British, ex-SAS, and even has a sassy, sexy blonde intel officer at his side. But don't expect any social engagements, sleek cars, or suave espionage in this game. Jones is the secret weapon of the international anti-terrorism group, IGI. He's the go-to man for assassination, infiltration, and demolition missions. And now, he's back in *IGI-2: Covert Strike.*

The original *Project IGI* was a sharp looking game that found itself muddled by AI flaws, no multiplayer, and an insane lack of in-mission saves. The sequel manages to take care of most of those shortcomings. The setting is familiar. With a mix of locales that range from Libya and China to old military bases deep in Russia, Jones scopes out intelligence, rescues a gun runner, marks SAM sites for a bombing run, and just generally tries to get out with his life in a search for traitorous scum, stolen nanotechnology, and tangled terrorist plans.

To that end, David finds himself crawling, crouching, sneaking, and occasionally running across nineteen missions. The level design completely integrates stealth gameplay, which is either a draw or a deterrent depending on your preferences. The sneaking elements, however, are done well, but the actual level design makes the locations feel less like volatile real-world hot beds and more like puzzle-based training simulations. It's a logic puzzle with headshots. Admittedly, Jones could go in guns blazing, but it would get him quickly killed.

If you can get past the puzzling nature of the actual game play, you'll find an intelligent, though often incredibly hard game of infiltration. *IGI-2* offers up the ability to save several times during a mission (much like the *Soldier of Fortune* series, you have a limited number of saves), but the difficulty level is significantly higher. Consequently, you still end up covering the same ground repeatedly until you find the secret solution to conquering the mission objectives.

Enemies are smart enough to be challenging, with decent aim, and a propensity to gather their friends when alarmed. There are still plenty of opportunities to snipe one guard while nearby enemies remain completely oblivious—even after the fact. Still, it's certainly no worse than most of the competition, and there's no shortage of bad guys to avoid, or terminate.

Easily one of the highlights of the original was its beautifully contoured landscapes, and *IGI-2* only improves on that feature. Sharp, detailed graphics compliment the natural looking outdoors where most of the game takes place, and the mix of indoor and outdoor locations within each mission keeps things from getting stale. Characters you encounter look realistic, with impressive facial detail and animation, although when alarmed, the enemy tends to run as if they have steel rods shoved up their spinal cords.

IGI-2's multiplayer game falls squarely into the *Counter-strike* category. It's entirely team-based, with a good guy vs. bad guy theme. Each multiplayer map has specific mission objectives for each side to accomplish, so team members must work together to complete objectives, while stopping the enemy from obtaining their goals. In one map, for instance, the terrorists must launch a rocket, which first requires them to fuel the rocket up and prepare the launch site, before finally triggering ignition. The good guys, of course, must prevent these three steps from occurring at all. The included maps are entertaining, and Codemasters has already released an additional one online. The general stability of the game, even with up to sixteen players, is remarkably good, and fans of team-based action looking for a new fix will definitely find this a worthy purchase.

IGI-2: Covert Strike is a solidly entertaining stealth game, but its emphasis on puzzle-like level design, and an unforgiving difficulty level makes it as frustrating as it is entertaining. Excellent graphics, interesting multiplayer modes, and a horde of missions, weapons, and enemies, however, still make it worth recommending. *–Jason D'Aprile*

Fuel the chopper, get some guns, and kick some ass… For Great Justice! [right] Jones scopes out the landscape with his gun running "friend."

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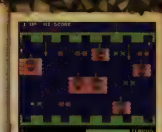

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PC CD-ROM

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TEEN T CONTENT RATED BY ESRB

Animals in skirts

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Putting the "die" back in "Indian." [right] From quainter days, when people killed each other over tea and stamps...

American Conquest

Give Me Death

★★½☆☆

[Author's Note: On March 11, 2003, due to political animosities, the U.S. Congress legally changed the name of French fries to "freedom fries." The eventual French response—that the delicacy originated in Belgium—has been subsequently revised to: "U-S-A! U-S-A!" In this article's effort to assist the war on terror, all French units in American Conquest will be referred to throughout the text as "French."]

A GAME SET against the backdrop of New World conquest and turmoil is just the shot in the arm the real-time strategy genre could use right now, but unfortunately the trappings of colonial America are far outweighed by those of modern European game design in GSC Game World's *American Conquest*. It lets you play as one of twelve factions ranging from the British, Spanish, or American colonists (anachronistically referred to as "USA") to the Iroquois, Sioux, or Inca tribes. Though the Native American factions outnumber the Europeans eight to four, all but one of the single-player campaigns has you playing as a European. The number of different units is mind-boggling, and the game does a good job of conveying distinct architectural styles amongst the various tribes. The Amerinds are well balanced against the Europeans even without the benefit of cavalry (they produce more units faster), and the AI in general is crafty even on lower difficulty settings. Forging alliances with neutral tribes in exchange for troops or raw materials adds an occasional layer of diplomacy.

Eight brief but engaging single-player campaigns cover Columbus's voyages, Pizarro's massacre of the Incas (against units confusingly labeled "Mayas"), and the Revolutionary War as seen from both sides. Though the missions don't always seem directly related to the historical "cutscenes" (a guy's voice reads scrolling text aloud in a breathless infomercial drone) and your objectives are sometimes vague, they nicely cover diverse ground and provide an effective tutorial of basic game mechanics. These are supplanted by nine non-campaign single player missions and six historical battles in multiplayer mode for an admirable grand total of forty-two.

Neither quantity nor authenticity is the issue. What really sinks the game is an overly arcane interface that sacrifices accessibility for tactical depth. The manual fritters away its slender page count with detailed instructions on which combo of icons will bestow a marginal combat bonus, as opposed to, say, a tech tree or a list of utilitarian base structures and their functions. A dandy little hotkey brings up a menu that lets you know what a unit's fears of fire and mobs are within a tenth of a percentile, and it's nice to know that 160 riders in line formation have +1 attack bonus over 90 riders (divide that into 16,000 and you'll know how many drummers you'll need). Creating and organizing formations of gobs of guys has never felt less intuitive or employed smaller, less distinguishable icons covered with miniscule hieroglyphics.

Gaps in logic and just plain gaps keep slapping you in the face. Your units fire through windows, which means building facing matters, but you can't modify this prior to construction the way the Founding Fathers did. There's no defensive mode for your troops, or a hotkey for attack-move, or sound effects when you create units. From time to time packs of giant animals shows up arbitrarily and decimate most of your peasants. An 18th century officer can't make a formation if his drummer's from the 17th century. Structures producing troops can't fire at the same time with their garrisons. There's no shared vision option. You

Gravity Kills

Puzzle games are incredibly relaxing ways to waste time in front of your PC, unless you enjoy watching the *3D Mark 2003* demo try to overheat your videocard. Games like *Buboids* fill a niche worth filling, particularly for those who are looking for a change of pace or play games on laptops. The basic gist of the game is that you rotate this 3D object that's usually made up of circles, and try to get your Buboids to the "exit." Unfortunately, there's this thing called gravity that gets in the way. It's simple and oddly compelling, which is pretty much what you can say about every good puzzle game. [Blue Dojo Studios, www.bluedojo.com]

can't set waypoints. Worst of all is the unconscionable holdover that made even admirers of *Cossacks*' teeth grind: the oily fog of war that submerges already explored terrain, rendering scouts useless.

Then there are the visuals. The sight of warring armadas, replete with shimmering trails of grapeshot reflected off the Atlantic as burning hulks run aground in Hudson Bay, is rather stirring. Too bad it's not a nautical warfare game. The money shots promised on the box, namely hordes in the tens of thousands of redcoats and rebels shooting each other in the face, look like Find Waldo pages on adrenochrome. Inchoate clouds of whooping unicolored blobs roil, merge twitchily, and burst. Your main structure, the fort, is so enormous that even at the highest resolution it fills the entire screen. Internet play is subject only to what Tom Ridge would consider "orange" lag but out-of-sync crashes as of this writing are common.

American Conquest is a loud bloody cartoon packaged in scratchy history lesson knickers. It's charming and irritating at the same time, like anchovy ice cream. And at this point, it's the only flavor on the menu. *–Kelly Wand*

DEVELOPER GSC Game World
PUBLISHER CDV • ESRB Teen

Harbinger

Stardiablo

★★☆☆☆

HARBINGER IS SORT of a sci-fi *Diablo v0.5*. With only a partial understanding of what made *Diablo* good, it transposes the action role-playing genre into outer space. Actually, it's not really outer space so much as a spaceship that seems to have been built from a bunch of metal-walled dungeons. You know it's a spaceship because every now and then a mission refers to going to a different part of the "ship," which is a matter of going to the next level.

The pre-built levels have the haphazard look of random levels but none of the replayability. The developers have hand-placed absolutely everything, robbing the whole game of any sense of exploration or freedom. There is only the option to go back to town between levels to sell stuff, with "Town," in this case, being a room with two aliens behind desks. Between them is a teleportation circle called an umbilical, which is aptly named considering the tethered narrative.

Although the three character classes play differently, leveling them up is so simplified that it takes a backseat to managing their inventories. You spend a lot of time arranging stuff in your grid, *Tetris* style, so you can carry as much as possible when you go back to those aliens behind their desks. After all, you're going to be selling most of the stuff you find. Treasure is limited to a particular class, and since you're only playing one of the three classes at a time, you can't use two-thirds of the things you find. So instead of replay value, *Harbinger* instills you with a lingering doubt that maybe you should have chosen one of the other characters. If this is enough to get you to play a middling action RPG over again, consider your money well spent. *–Tom Chick*

DEVELOPER Silverback • PUBLISHER Dreamcatcher • ESRB Teen

This level takes place in the ship's onboard junkyard. [right] Instead of skills and abilities, your characters get to attack with different colors.

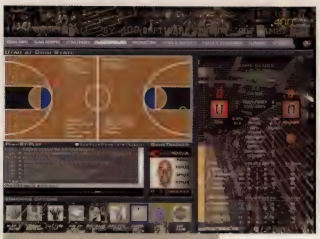
Tournament Dreams College Basketball

On the Bubble

★★☆☆☆

ONE OF THE differences between a text-based sports game and one with flashy visuals, aside from the obvious, is that in the former the simulation engine is of primary importance. A game with blazing graphics can use those graphics to fall back on if the gameplay isn't ultra-realistic. A text simulation has no such luxury. Such is the case with *Tournament Dreams College Basketball*.

This is a frustrating game because it's easy to see how great it could be. It has nearly every feature you could possibly want in a college basketball game: 320 Division-I schools, pre-season tournaments, a deep recruiting model, top-level players who leave early for the NBA draft, the NCAA and NIT tournaments (although they are not called that due to licensing, the players are all fictional as well), players who fail to make grades, and so on. It's a staggeringly detailed game jam-packed with stats, charts, and settings.



You can sim your games or coach from the bench.

Unfortunately, all of these great features are thrown out the window due to a suspect simulation engine that simply doesn't make a lot of sense. The game simply fails to simulate college basketball. Scores are way too high, 40-point blowouts are commonplace, and upsets are too prevalent. You know you are playing a flawed game when Duke beats Oregon 105-41 or when Wisconsin beats Florida A&M 104-30 and then loses to Dayton 90-60 the following week. Watching #1 Illinois lose to #16 Towson 87-60 in the first round of the NCAA sends chills down your spine as not only would this be the first 16-seed to beat a top seed in the history of the tournament, but on top of that it was a blowout.

The bright side is that the developer is supporting his game, and several patches have been issued and more are on the way in an attempt to get it right. Until that happens, it's best to hold off. *—William Abner*

Tournament Dreams College Basketball can be purchased online at www.tournamentdreams.com

DEVELOPER Arlie Rahn • PUBLISHER 400 Software • ESRB Everyone

1503 AD: The New World

Make, Build, Grow, Watch

★★★½☆

"SPARE WOOD… so more houses. These ones need cloth… so another weaver's hut here… maybe one more sheep farm back here… clear the trees so the sheep can graze. All that extra brick… lay out some cobblestone roads to the market stands… sell extra bricks to… who wants them, the Eskimos, the Bedouins, anyone? Why aren't these settlers upgrading?… Oh, no spice… Trade route good, but spices backed up at tropical colony… Build another ship, but not enough cloth yet. Too much iron ore… Make tools, sell them, sell tobacco, too… Tiny people, streets, buildings, little islands…"

This is your brain on *1503 A.D.: The New World*. Navigating the tangents of this intricate ersatz economy is like a casual brisk stroll for your brain with a lively ant farm of activity to watch. Even though it's a sequel, or maybe because it's a sequel, there's really nothing new here. Start with a ship of goods, three hours later you have a thriving sixteenth century metropolis crawling with busy citizens.

1503 adds more goods, more types of AI cities, and more choices for goal-driven scenarios or free-form sandboxes. It also has a steeper learning curve than its predecessor, *1602*. When it comes to figuring out how to keep your cities growing, it's not so easy to dance around the rim of that terrible death spiral of not having enough money to build the things you need to make money. Because your economy is a slow ponderous beast, and because armies are so prohibitively expensive, the stakes are really too high for the level of its real-time strategy combat. But otherwise, this is a blissfully familiar Zen exercise in zoning out and simming a city. It might as well be a haiku: there's a rigid format in effect and it doesn't look like anything special, but that doesn't deprive the little thing of its lyrical sweetness. *—Tom Chick*

DEVELOPER Sunflowers • PUBLISHER Electronic Arts • ESRB Teen

High Heat Baseball 2004

Going Console

★★½☆☆

HIGH HEAT BASEBALL 2004 is the Xbox version of the venerable series directly ported to the PC. For a game that has its roots steeped in the PC market, such a dramatic shift is more than a bit unsettling. There is limited keyboard support, no

1503 AD: Oh quaint New World that hath such cute houses in it.

mouse support, no one-pitch manage mode, and no on-line play. Gone are the days of the streamlined spreadsheet-style interface that allowed you to navigate through the game with ease. In its place is a monstrosity of a design that makes it a chore to find the most basic statistical information or player ratings.

Poor interface aside, there are other problems with this year's version, such as bonehead franchise and roster management AI. A financial model is part of this year's design but is flawed almost to the point of absurdity. When no team offers players such as Sosa, Giles, Bonds, or Guerrero a free agent contract for the entire season something is definitely wrong.

There are two saving graces: gameplay and graphics. On the field, this is the best *High Heat* game to date. There are over 20 different pitch types from the moving fastball to the power curve and each has a unique trajectory, which makes hitting more challenging. Visually, it's arguably the best-looking baseball game ever made for the PC. The animation is smooth and the player models look realistic; *High Heat*'s reputation of being a game that played well but failed to look the part no longer holds water.

If all you want out of a baseball game is to play it on the field, without worrying about tracking stats, trades, and career play, then this is a great choice. However, if you want to run a franchise and delve into all of the other options that the game offers, the horrid interface combined with the franchise mode shortcomings make it impossible to recommend. *—William Abner*

DEVELOPER/PUBLISHER 3DO • ESRB E

Out by a mile.

HEROES OF MIGHT AND MAGIC IV: WINDS OF WAR *3DO/Everyone* ★★½ *The Gathering Storm*, the first expansion for *Heroes of Might and Magic IV*, included 24 campaign scenarios, seven buildings, four creatures, and 16 artifacts. *Winds of War* has less of everything—if the trend continues, a third expansion pack might fit onto a floppy disk. The additions are more serviceable than inspiring. For example, five of the six campaigns feel slight at only three scenarios each, and none have much in the way of quests, triggers, or story elements. The single-scenario final campaign lets you pick one of the heroes from the previous five and use it to defeat the other heroes. It's a nice idea, and it means the last scenario is sort of like five scenarios in one, but the map takes forever to play, and isn't that entertaining. The new creatures aren't very exciting, either, and of the six new buildings, four are habitats for creatures from *The Gathering Storm*. In other words, the new buildings feel more obligatory than anything, and that describes *Winds of War* as well. *—Steven W. Carter*

REINER KNIZIA'S SAMURAI *Klear Games/Not Rated* ★★★★ For boardgame fans, Reiner Knizia needs no introduction. Creator of many interesting and innovative designs, from the abstract *Durch die Wüste* to the cooperative *Lord of the Rings*, almost any game with his name on it is worth a try. *Samurai* is no exception. It's more of a puzzle game than most of his other efforts, but because you can easily play half a dozen games in an hour once you're familiar with the system, the computer version lends itself quite well to the "lunch break" style of gaming. The system itself is both incredibly simple and computationally intensive. Each player vies for control of three castes in feudal Japan: religious, noble, and peasant. Representatives of these castes are scattered across a map of Japan, and by placing hexagonal tiles in empty spaces adjacent to these targets, you claim control of them based on the type of tile you play. Once a particular space is sealed in, the player who exerts the most control over the space scores points. The computer version remains true to the boardgame while stumbling in simple areas like the inability to see the complete playable map at once without scrolling, and the lack of a running score to show players' relative positions. Despite this, the design itself is strong enough to warrant a place on every gamer's hard drive. For $20, it's a slam dunk. (*Samurai is available from Klear Games, www.klear.com*) *—Bruce Geryk*

CHEMICUS *Tivola Publishing/Everyone* ★★ Do you have a degree in chemistry? Do you want one? If you happen to be interested in organic and inorganic chemistry, molecular structure, electrochemistry, atomic structures, the ins and outs of the periodic table, and the mechanics of making copper-coated iron nails or fabricating sparklers—and who isn't?—you're treated to experiences involving all of these things. *Chemicus* takes the hackneyed "your-friend/relative-has-been-kidnapped-and-you-must-find-him/her" approach. This time, your search takes you into the somewhat *Myst*-like world of Chemicus. The puzzles are difficult for anyone without a background in chemistry, but you can always consult the game's excruciatingly detailed knowledge base if you're stuck; or, in certain situations, you can use the dreaded "try everything in your inventory" approach. Providing educational content is really this game's *raison d'être*—and it is only in that sphere that it succeeds, as its thin storyline, bothersome navigation, and heavy-handed, narrowly focused content will probably lull anyone but motivated lab rats right to sleep. *—Cindy Yans*

bargain bin

Black & White

Peter Molyneux's experiment with big animals that poo might not have been the innovative tour de force that some were expecting but it's still worth a look-see if only to see where the promising design careened off the rails, especially now that Electronic Arts has dropped the sticker to a low, low price of just $15. [Electronic Arts/2001]—*Brett Todd*

DirectX 9 for Everyone

NVIDIA delivers DX9 for every budget with the GeForce FX 5600 and 5200

GEFORCE FX 5600 ULTRA ★★★★½

GEFORCE FX 5200 ULTRA ★★★½

BY JASON CROSS

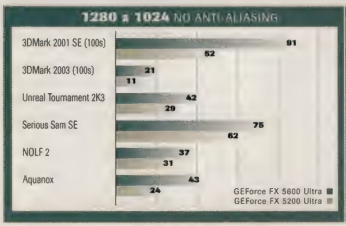
IF YOU READ last month's issue, you know we aren't too fond of the fastest card in the GeForce FX line, the 5800 Ultra.

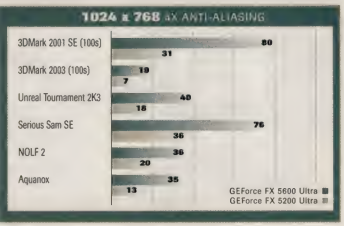
For the $400 that card costs, no one expected the a six-month old ATI Radeon 9700 to outrun NVIDIA's top-of-the-line. And nobody should tolerate the horrific noise it makes. It's always been NVIDIA's intent to bring the general architecture found in that card down to budget levels extremely quickly, and they have. The 5600 and 5200 series, which will be available from various vendors under a number of different names, represents the mid-price and budget lines, respectively.

The 5600 most closely resembles the bigger 5800 cards. The only major differences include a reduction in the number of pipelines from eight to four, and lower clock speeds. The 5600 Ultra tested runs at a core clock of 350 with 700MHZ DDR RAM (DDR2, used with 5800 cards, is not necessary). All the other features are there, including the same compression capabilities, and so on. Naturally, chopping the number of pixels drawn per clock in half and lowering the clock speeds has a huge impact on performance, but at half the price of its blow-hard big brother, don't expect miracles.

In terms of performance, the 5600 Ultra runs about the same speed or even a little slower than the GeForce4 Ti 4200 in most current games at default settings. The GeForce FX architecture really shines when you turn on anti-aliasing or anisotropic filtering. With these features enabled, the card is often 50% faster than the Ti 4200 or more. This is definitely more in line with what's expected out of the next generation of $200 graphics cards.

The 5200 Ultra is an interesting animal. With four pipelines and a core/memory clock of 325/650, you would expect it to be only a little bit slower than the 5600 Ultra. But in order to get the costs down,





most of the new compression features have been cut and cache sizes reduced. This seriously impacts performance, but again, this is a budget card. In fact, the Ultra model tested will retail for $149, and there will be slower versions retailing for less than $100.

The budget card doesn't fare nearly as well as the mainstream model. It barely outpaces the old MX440 card—which it is meant to replace—and almost keeps up with the 5600, but once you turn on anti-aliasing, frame rates take a nosedive. As with most budget video cards, it's not really fast enough in the first place to consider enabling AA or anisotropic filtering in the latest games.

The 5600 Ultra and 5200 Ultra both represent a reasonable speed boost for mid-price and budget video cards. However, their biggest advantage is that they both deliver the same DirectX 9 features as all cards in the GeForce FX line. There's no repeat of the misleading GeForce4 MX debacle or ATI's horrible naming of the Radeon 9000 and 9200 (both DirectX 8 cards, not DX9). It's fantastic that NVIDIA will bring DX9 shaders to the masses with low priced 5200 cards, but the speed is low enough that it will quickly run out of steam with upcoming games that could benefit most from those capabilities. If you want to play all the fancy upcoming at full detail, you need to invest in at least a 5600 card, Perhaps going for a non-Ultra model if you're trying to save a few bucks. *—Jason Cross*

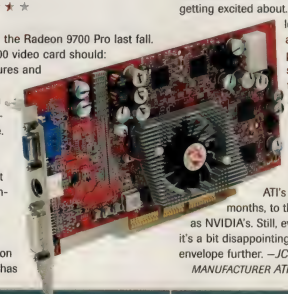
MANUFACTURERS Various • MSRP 5600 Ultra: $199, 5200 Ultra: $149

Radeon 9800 Pro

Kicking it up a Notch

★★★½☆

ATI HIT ONE out of the park with the Radeon 9700 Pro last fall. It embodied everything that a $400 video card should: a giant leap forward in both features and speed. The 9800 Pro is just what its name implies; a slight revision designed more to maintain a performance lead than anything else.

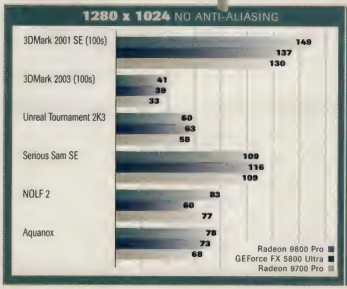


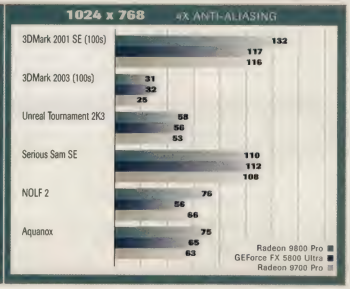
There's little to say about the 9800 Pro that hasn't already been said about the 9700 Pro. It's almost exactly the same card. It's still manufactured using a .15 micron process (the mid-level 9600 cards are ATI's only current .13 micron chips). It's still using regular DDR on a 256-bit memory interface. It still has eight pipelines. The chief difference is clock speeds. Due to some maturity in manufacturing and a few design tweaks, the 9800 Pro runs at a core clock speed of 380MHz, a 17% improvement over the 325MHz speed of the earlier card. ATI has boosted RAM speed by less than 10%, from 310MHz to 340MHz.

There are a few other minor enhancements, but nothing worth getting excited about. A new "F-buffer" lets the chip run infinitely long pixel shader programs in OpenGL, albeit at a speed penalty, by writing out temporary data to the card's memory. There are slightly tuned anti-aliasing and compression technologies. The end result is a card that is anywhere from five percent to 25 percent faster than the Radeon 9700 Pro, but the entire point of this product's existence seems to be that it is a tiny bit faster than the GeForce FX 5800 Ultra. (At least it doesn't have a Dustbuster attached to it.)

ATI's drivers have matured in the past few months, to the point where they're nearly as trouble-free as NVIDIA's. Still, even though this is the fastest card out there, it's a bit disappointing that ATI's next generation doesn't push the envelope further. *—JC*

MANUFACTURER ATI MSRP $399





Dimension XPS

Dell Goes Hardcore

★★★★★

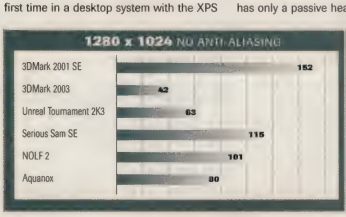
THE 8000-SERIES Dimension systems from Dell have always offered enough horsepower for hardcore gamers, if configured properly. But if you wanted a serious prebuilt enthusiast system, you'd have to go with a boutique PC shop like Alienware, Falcon Northwest, VoodooPC, or Velocity Micro. With the debut of the new Dimension XPS line, Dell is targeting serious enthusiasts who demand top-of-the-line equipment. And it has delivered one of the very best systems on the market.

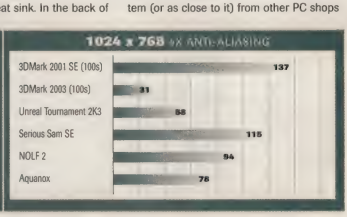
The new XPS line is based on Intel processors, like all Dell systems, but this one uses the brand-new 875 chipset with support for dual DDR400 RAM and new Pentium 4 processors using an 800MHz bus. The fastest of these chips is used (3GHz) along with a full gigabyte of fast RAM. It has a 4X NEC DVD+RW drive for optical storage, an Audigy 2 for audio, and the fastest video card money can buy, an ATI Radeon 9800 Pro. It's the fastest system we've ever tested, whether for productivity apps, video encoding, or gaming. Our test system was rounded out with one of those great Logitech MX-500 mice, a Dell Ultrasharp 18" LCD, and Logitech's fantastic Z-680 speakers. While we wouldn't necessarily recommend this LCD for gaming, your configuration options are pretty broad. In fact, you'll find peripherals and options with XPS systems that you won't find with Dell's other lines, including lots of cool hardcore gamer-y stuff like controllers and high-end speakers.

A perfect example of this is striped RAID hard drive configurations, available for the first time in a desktop system with the XPS line sometime later in the month of May. We tested one of the first RAID setups, with two 120GB serial ATA hard drives plugged into a Promise SATA controller, making for one giant, incredibly fast 223GB partition. It makes copying large files, unzipping big archives, and loading those large levels a joy.

Probably the biggest advance in the XPS line is the new case. It's one of the most attractive Dell's on the market, a nice muted blue with a brushed metal accent piece on the front. Engineering flourishes abound. The front-mounted FireWire, USB, and headphone jack are near the top of the machine so you don't have to get on the floor to plug things in. The door covering the optical drives swings open and then flips back along the side to keep from being knocked around. The machine's entire base is actually the power supply, removing that big hot hunk of metal from the inside of your case and keeping the thickest cord behind your PC down by the floor instead of passing by all your other cables. The heat management is unique indeed, with a big green closed-off hood covering the CPU, which has only a passive heat sink. In the back of the machine, two big fans circulate lots of air through this little "CPU area," making it whisper-quiet during normal desktop activities. When the CPU really gets hot during demanding games or video encoding, the fans spin up a bit and get louder, but at its worst it's still quieter than most high-end systems. A single latch on the swings open the side door on a hinge in front, taking the drive bays with it. Everything inside is very easy to work with, nothing really gets in the way of anything else. All the drive rails are right there in the empty bays waiting for use, and the AGP/PCI cards are held in with a single quick-release lever instead of half a dozen screws. Airflow is great—by keeping the hot CPU separated from the rest of the airspace, it stays pretty cool.

If it sounds like a pretty killer high-end enthusiast system already, wait until you get a load of this: this XPS configuration costs hundreds of dollars less than a comparable setup from any other major vendor. That's right, we tried to build the same system (or as close to it) from other PC shops





and found ourselves spending $200–600 more, often sacrificing a cool case in the process. And the XPS includes stuff like Microsoft Works, and DVD authoring software, further separating the prices. There's no doubt that we're talking about very high-end, enthusiast-targeted, expensive PCs here. Starting at well over $2000, the XPS systems aren't cheap, but considering the relative price to the rest of the market, they're still a great deal.

With the Dimension XPS line, Dell enters the enthusiast PC market with a bang. Its top notch configurations, slick case innovations, and aggressive pricing are bound to shake up this market and put the hurt on smaller vendors that used to have it to themselves. *—Jason Cross*

MANUFACTURER Dell • MSRP $3226, $418 with monitor and speakers

X-Arcade Solo

Arcade for One

★★★★½

SEVERAL MONTHS AGO, we reviewed the original two-stick X-Arcade and found it to be exactly what it claims: a rock-solid box of actual arcade joysticks and buttons that perfectly replicates the quarter-munching experience at home. Now XGaming delivers a more affordable, one-stick model for those that don't regularly play with a buddy. It's still pricey, but $50 cheaper and certainly smaller. It's otherwise identical, and works with all of the adapters the company makes so you can get your dragon-punch on with your PS2, Xbox, GameCube, or Dreamcast. Again, the perfect arcade feel adds so much to those old emulated arcade games on your PC that you'll discover a love of retro-gaming you never knew existed. *—JC*

MANUFACTURER XGaming • MSRP $99

Zboard

The Better Gaming Keyboard

★★★★½

THERE ARE ALL kinds of gizmos and contraptions to replace the keyboard as the primary controller for games, and most aren't as good as the thing they're trying to replace. The idea behind the Zboard, a brilliant customizable keyboard from Ideazon, is that it makes more sense to merely make a better one.

It works like this: you buy a base for $30 that has no keys, just a bunch of little stubs plus your standard programmable quick navigation and media buttons. Then you buy a $20 "skin," a folded-in-third full size set of keys that you simply lay into the base and snap down. It only takes a couple of seconds. The base recognizes the special functions and custom layout of that key set and sends the appropriate commands to your computer. Games don't need any special patches, they're just accepting standard keystrokes.

There are few skins available right now, but both the *Age of Mythology* and *Medal of Honor* sets improve the play experience. Ideazon has a bunch of other skins coming, and promises to release info for the hardcore on how to tweak the layout scripts for them. This is a rare example of an out-there idea that really does work, and it's well worth the expense for hardcore fans. Now cross your fingers for a *Battlefield 1942* model. *—JC*

MANUFACTURER Ideazon • MSRP $30 for the keyboard, $20 for each overlay

HARDWARE TEST PLATFORM Unless otherwise stated, the base platform for all listed benchmarks is as follows: **PROCESSOR** Pentium 4 3.06HT GHz **RAM** 512MB PC1066 RAMBUS **MOTHERBOARD** Intel D850EMV2 (i850 chipset) **HARD DRIVE** Maxtor DiamondMax Plus 60 **AUDIO** Sound Blaster Audigy 2

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applied game theory

SimTreadmill

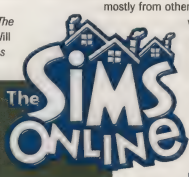
Lessons learned from The Sims Online

BY HENRY JENKINS AND KURT SQUIRE

THAT *THE SIMS ONLINE* appeared on the cover of *Newsweek* before it even shipped points to not just the record-setting appeal of the original *The Sims*, but also how online games might be the test bed for some of the most interesting issues of the next decade. Who owns creative property owned within a virtual world? What locality determines how transactions within virtual communities are regulated (and taxed): the consumers' location, the servers' location, the corporation's location, or some combination of all three? If you doubt the economic or political importance of online gaming, in his study of *EverQuest*'s economics, Edward Castronova found that the gameworld GDP is roughly akin to that of Bulgaria.

The Sims Online, backed by the brand recognition of *The Sims*, the marketing of EA, and the genius of designer Will Wright, could bring these issues to Main Street. *The Sims* franchise already turned non-gamers into digital authors, thousands of whom created character skins, wallpapers, texture art, or storybooks with the game. Now, *The Sims Online* promises to have massively multiplayer newbies buying and selling virtual goods with real money, participating in guilds or other virtual communities, and of course, having Net Sex.

"Online games evolve over their lifespan, and hopefully The Sims Online will grow into the dynamic, creative community that Maxis envisioned."



So far, however, the dramatic potential is mostly just hype. Initial sales (estimated at about 100,000 as of this writing) are strong for a massively multiplayer game but by far the weakest of any of the *Sims* properties to date. The gameplay has also disappointed many. The skill-development and money-earning mechanics are surprisingly non-interactive. Players simply click on objects (such as a chess board) and watch their avatars play chess to enhance skills. If you play it for any amount of time, you will find row after row of people seated at skill-enhancing objects. In fact, chances are that only half are at their keyboard at any given time; the others have gone off to do more interesting things as they max out their characters' skills. Most of the houses reflect this skill-enhancing focus, consisting of row after row of skill-enhancing objects. Sadly, the avatars depict a very narrow range of body types resulting in limited expressive potential for players.

Of course, Maxis and the game's designers had hope for much more than this. The big idea behind *The Sims Online* is that players would use the games' objects and environments as virtual theme parks, stages for acting out interactive dramas and exploring virtual identities. Its designers hoped that players would make worlds more creative and inventive than any single design team could muster. However, with game mechanics that privilege skill development over interactive storytelling, and a game system nearly devoid of conflict, perhaps it is no surprise that it looks more like SimTreadmill than SimTheatre.

The Sims Online also reminds us the persistent world games are really services, where the players themselves become part of the content. Certainly good role-players and storytellers are out there, but developing a good role-playing and storytelling community is difficult. *The Sims Online* has collaborative filtering tools designed to help players find others with similar tastes, but its current player-base comes mostly from other massively multiplayer games, which are often about level advancement or achievement. Log on to the game and watch players talk about "greening up" (a term for regenerating health which came from *Dark Ages of Camelot*) and power-leveling and you get the sense that this is not the player-base the game was designed for or the culture its designers imagined. Of course, one could point to other problems behind *The Sims Online* which encourages this behavior—could any game which can essentially be played while away from keyboard be successful as a game?—but the critical role that the first generation of users played in creating the initial culture should not be overlooked.

Whether *The Sims Online*, or any other game, manages to fulfill the hopes of online community stalwarts remains to be seen. Attracting a diverse player base to such an expensive, time-intensive entertainment medium is just one of the many issues confronting next-generation massively multiplayer game designers. Online games evolve over their lifespan, and hopefully *The Sims Online* will grow into the dynamic, creative community that Maxis envisioned. If not, there's no doubt *Star Wars Galaxies* and a host of others will be right behind them trying.

Henry Jenkins and Kurt Squire run the Games to Teach Project at MIT. Jenkins is the Director of the Comparative Media Studies Program; Squire is finishing his doctoral degree in Education from Indiana University. You can find more information on the program at cms.mit.edu/games/education

Cash Cow Despair

Exploring alternatives to the level treadmill in online RPGs

BY CINDY YANS

RECENTLY, AS I was browsing some game-related websites, I was treated to a flashy pop-up that bullied its way into the foreground. (Don't you just love those?) In a style that was almost melodramatic and Big Voiced, it said, "SHADOWBANE. Are you ready?" And, you know? I'm not ready. And I'm not ready for *EverQuest 2*, or *Dark Age of Camelot: The Mindless Years*, or *Anarchy Online: Shadowlands*, or *Asheron's Undergarments*, or any number of other online RPGs because, frankly, I have been waiting for a paradigm shift for a long time, and haven't seen one.

To be fair, the paradigm does have three subsets, the most prevalent of which is the "kill, loot, sell, buy stuff, repeat" variety. Pure crafters (quite a minority) play the "build, sell, gather better materials, build, sell, etc." game, and Chatters sit around, occasionally taking action described in the first two sets, but mostly trying to solve the problems the world faces today. All right, they also play analyst to their friends, swap stories, and have cybersex.

A few months ago, after posing the question, "Is role-playing dead?" many players responded. A slew of them are players of MUD-like, text-based games, and believe that online role-playing definitely exists, just not in any of today's "popular" games. One person went so far as to say, "MMORPGs have little if anything to do with role-playing, and probably should just drop the RPG from their title." OK. Let's say that the best-selling online RPGs are not RPGs at all (except to those who have had no other experience with the genre). Let's call them OCCs (online cash cows). These games enjoy plenty of success, but they've also been plagued with many problems.

Developers of the sequels to the OCCs have no reason to change the paradigm. Why would they? They know what sells and, being involved in a business like any other, they continue to provide the ever-steadfast lather-rinse-repeat commodities. Most agree that we're now in the "second generation" of online role-playing games. Each and every developer has identified a set of the first generation model's inherent problems and tried to solve them. They seem to be working hardest on providing players with an experience in which their actions actually make a difference in the game world. *Shadowbane*, *Asheron's Call 2*, and *Horizons* are certainly attempting to do so, with their player-driven community building and/or divergent storylines. I'm sure many others are as well.

When you strip down any one of these games to their basics, though, their similarities are far more profound than their differences. Sometimes it seems as if they're all the same game, really—one that knows that a player's immediate need for social or financial betterment supercedes any real desire to think, solve, or actually role-play. What this implies to me is that there *is* no way to shift the paradigm. Most games that have tried to do something different (whether or not in the RPG realm) have failed. Electronic Arts' *Majestic* (a rather *extreme* example of originality), and its *Motor City Online* went downhill quite quickly; its *Battletech* 2035 didn't even make it out of the beta stage.

One of our writers offered us a feature story that he called "A World Without Rats." He wanted to explore the phenomenon of online RPGs that have no combat component at all. He submitted an outline that covered theoretical gameplay dynamics, discussed the social implications of the nature of combat and violence, asked the question "Are non-violent games doomed to die?" and provided a host of examples of online RPGs that are offering no-combat models. Actually, he provided two: *A Tale in the Desert* (the jury hasn't come in on that one quite yet), and Disney's *ToonTown*, which doesn't really count because its combat is more "prank-like" than violent.

I wonder about some of the designers of the original set of MMORPGs. They've formed splinter groups, brought their creative visions to other companies, or formed companies of their own. What are they up to now? I have this small trickle of hope that they're lurking in their trenches, waiting for the right moment to burst forth with the news that they have created something entirely different that doesn't fit into any of the current level treadmills. More likely, though, they're plunging into the ever-expanding world of console games.

> "OK. Let's say that the best-selling online RPGs are not RPGs at all."

OK, don't get me wrong, I have been, and still am (sort of) a fan of several games in the OCC. And if, indeed, it isn't possible to break out of that mold (and succeed), I'll continue to play what the market has to offer. In fact, *Shadowbane* arrived at our offices yesterday. Sigh. Maybe I *am* ready.

Polarized

Dreaming of genres living together in peace and harmony

BY KEN LEVINE

I have a dream. I have a dream of a day where all game genres can be successful. Where the flight simulation and the real-time strategy game and the first-person shooter and the role-playing game can share the store shelf together in harmony, with ample room for all. I dream of a place where turn-based World War II tactics games can rise to number one on the sales charts with its mass-market brothers and sisters.

This dream, of course, is not going to come true. The conventional wisdom in the biz these days is that the PC market is going permanently south. Not only have the consoles eaten the PC gaming's lunch, they have their eye the other two meals. As shelf space shrinks, it is only a matter of time before PC gaming becomes the next folk music—the kind of thing that they only talk about on NPR.

85/15

"The wargaming market has recently undergone a huge revolution, thanks to a number of web sitesthat forego the traditional retail channels and sell directly to the consumer."

Humbug. Is there some huge revolution a-brewing? Are PC games going to suddenly starting blowing people's minds in a way they haven't ever before?

Of course not. PC games are, by nature, niche-y. They're a pain in the ass to install. Given the multitudinous variety of hardware and drivers, they're buggy almost by definition. And to add insult to injury, you can't rent them at your local Blockbuster before slapping down fifty bucks of hard earned green at the Electronics Boutique counter.

However, these are not the causes of our beloved medium's decline. To figure that out, we need to look at classic business realities. The MBA types have this concept called the "85/15" rule. 85/15 refers to the fact that, in a mature industry, 85% of the business of any type of product, is generally done by 15% of the product. Take cola, for example. When's the last time you've seen somebody drink a cola that wasn't manufactured by Coke or Pepsi? What kind of peanut butter is in your pantry? I bet you 85 to 15 it's Skippy, Jiff, or Peter Pan.

Shelf space is the holy grail of game publishers. It defines how much product they can sell. If a publisher can't get its games on the shelf, it can't sell any product. The more of its games it gets on the shelf (or preferably in giant displays or end caps), the more these games get noticed, and the more likely it is they will be purchased.

Shelf space ain't free. The publishers beg, bargain and pay the retailers through the nose for it. The more shelf space a publisher has, the more games it will sell. The more games it sells, the more shelf space it will have. Do the math: the big get bigger, the small fade away.

Take a look at the typical monthly PC sales charts [see page 77 for this month's]. four are from one franchise, and ten are by a single publisher. That's called polarization, and it's a monster that feeds on itself. The more polarization there is, the more there will be. And when an industry matures, 85/15 happens.

Now let's talk about the victims: flight sims. Turn-based games. Space sims. Wargames. Adventure games. And pretty much anything that isn't a licensed product or sequel. What genres are next? RPGs? Strategy games?

The fans are still out there. They're still hungry for those games. There just aren't enough of them to feed all the mouths of the middlemen that take a cut as a game winds its way from the developer's office to your local GameStop.

Who's going to build these games? Well, truth be told, people already are. The wargaming market has recently undergone a huge revolution, thanks to a number of web sites that forego the traditional retail channels and sell directly to the consumer. A few years ago, you couldn't find a single game that covered modern naval combat. HPS Simulations offers two set in World War II! Matrix Games offers several products focused solely on the Napoleonic period. Ah, sweet niche-y Napoleonics.

There is a future for these "fading" genres, but the fans and the developers are going to have to work together to find each other. The retail world is never going to choose flight sims over *The Sims*. But the nerds will abide. We always do.

Ken Levine is the General Manager and Creative Director of Irrational Games.

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Alone Again, Naturally

Where are the official single-player mods?

BY BRETT TODD

GETTING AN ADSL connection was supposed to increase my productivity. Of course the enhanced phone line that Ma Bell finally deigned to fix up in my one-horse town this spring did nothing but extend the hours that I spend bathed in the blue glow of my monitor. So much so that I'm beginning to need the hum of my PC fans to fall asleep in the same way that a newborn child needs the heartbeat of his mother. I wake up to streaming news feeds, pile up the message board posts now that pages load so much faster than before, check out video-oriented gaming industry content that was previously verboten in my 56K gulag, and of course play lots of online multiplayer games. I'm guessing that I'll be in need of some sort of help from Dr. Phil before too long.

Or maybe not. For as much as I've been addicted to the net for the two weeks since my high-speed connection went live, I can see signs that the frenzy won't last much longer. This has become most evident in my gaming patterns. Where I thought that getting access to all of the online multiplayer games I could stomach would mean that I would play as many online multiplayer games as I could stomach, this hasn't proven to be the case. Although I could have read—no, written and annotated—*War and Peace* in the amount of time that I've sunk into *Battlefield 1942* and its *Road to Rome* expansion over the past fourteen days, I haven't been delving into much else. There have been no uncanny urges to experience *EverQuest* in all of its 1Mbps splendor, to kill kids from Kansas in *Unreal Tournament 2003*, to see if it's any easier to take a shower and go number two in *The Sims Online* than it is in *The Sims* offline. I would have assumed that I was just jaded with the state of online PC gaming at the moment if not for the unopened Xbox Live package that's been gathering dust mites in my living room since last Friday.

Maybe this means that I'm a solo gamer first and foremost. Which probably isn't much of a surprise, given that the games that get into my head are customarily the ones with memorable single-player moments. I've always preferred the likes of *Thief*, *Half-Life*, *Disciples*, and *Freedom Force*—games that place importance on story and setting over mechanics and modes of play. Though I have gotten thoroughly wrapped up with *Unreal Tournament*, *Ultima Online*, and others, these experiences have always seemed like the gaming equivalent of the 70s sitcom. I play *Counter-strike* like I watch episodes of *Sanford and Son*, and forget half-hours spent with each in about the same time it takes me to make a bologna sandwich.

I'm almost certainly not alone. Stats show that gamers typically don't touch the multiplayer component of the average title. This begs the question of why developers and publishers are so focused on enhancing multiplayer modes with official add-ons and expansions. As much as the *Unreal Tournament 2003* and *No One Lives Forever 2: A Spy in H.A.R.M.'s Way* online communities undoubtedly appreciate the bonus packs that were just released by the developers at Epic and Monolith, you've got to wonder how many are really paying attention. Free added content is nothing to honk your nose at, but when you're not reaching the majority of your fans, you're simply not getting the job done.

> *"Stats show that gamers typically don't touch the multiplayer component of the average title."*

While providing extra single-player goodies would be a lot tougher than schlepping out maps, creatures, and multiplayer modes of play, the impact with gamers would be stronger. Where people now expect official multiplayer add-ons to hit the web within weeks of a game reaching stores, they don't take solo stuff for granted. Look at the reception that was given *Trials of the Luremaster*, a lengthy additional quest for *Icewind Dale* that Interplay commissioned in the wake of complaints over the shortness of the retail *Heart of Winter* expansion. Or the way that Bioware jumpstarted the already exploding *Neverwinter Nights* modding community with the *Witch's Wake* series of modules. Or how much buzz typically accompanies the announcement of homebrewed campaigns and total conversions, even when at least nine out of ten of these projects never see the light of day.

Demands for single-player material in downloadable add-ons aren't likely to be greeted too kindly by the overworked staff at development houses, but the extra labor might be worthwhile in the long run. Luring people to your products with the promise of added material that they'll actually play could make a real difference in the bottom line. Currently, online bonus packs are nothing more than a reward for those who already own your games. Provide something of more substance and you'll be both rewarding your fanbase and tossing out a carrot for potential buyers on the fence. A little extra effort could go a long way, especially if there are more loners like me out there.

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It's the last computer I'll ever need

BY JASON CROSS

When our family got rid of its original Apple II, with its 80-column card, and replaced it with an Apple IIe, it was all the computer I ever needed. I could play anything out there, except for all those cool Commodore 64 games, but I went over to my friend's house for that.

Then we bought an Apple IIgs, and it was so incredibly advanced—you should have heard the music in *King's Quest IV*—that it was clear it would gain broad industry-wide support. It had a cool GUI and the best graphics and sound, and a slick off-white color, and a huge 12-inch monitor. Up to 16-colors in high-res 320x200 mode, and dithered down to four in 640x200 mode, all from a huge palette of 4,096. Wow!

Then we couldn't run some of the newer IIgs software, so we bought a clear plastic tube of upgrade RAM chips, which I rolled ever so gently on the table to make the pins straight and carefully pushed one-by-one into the motherboard until I had a whopping one megabyte. An astounding amount of memory! What on earth do people need those $2,000 hard drives for when they only hold like 20 megabytes?

> *"This was over seven times faster! It had twice the RAM! It had a 40MB hard drive!"*

Then I went into the software store one day and the Apple section was about four feet wide, while the PC section was closer to forty. It was clear that I had to get a PC, so I sold the Apple to my school (suckers!) and bought one of the most advanced PCs out there, a 286. It could display 256 colors at once, and even had a cool "turbo" button on the front that made it go faster. I missed the digital sound from my cool Apple, but at least this computer was cheaper and I could run all the new software out there.

It wasn't long before I had to get a 386SX, with a top speed of 20MHz. I'm not sure I ever really knew at the time what the speed of my amazing IIgs' CPU was, but it turns out it was 2.8MHz in the faster of its two modes. This was over seven times faster! It had twice the RAM! It had a 40MB hard drive! It ran *Wing Commander* like a charm, and that Sound Blaster plus the digital voice pack…man, how did I ever think the sound was cool on my Apple?

Then I bought *Ultima VII*. It literally used up half of my hard drive space, plus one megabyte for every saved game. I spent the whole first day after purchasing it editing my autoexec.bat and config.sys files, trying to find a way to load both my mouse and my Sound Blaster drivers up without using expanded memory. And if you think system requirements are steep today—imagine a game that eats up half of your 40GB hard drive, plus 1GB per save.

Doom finally broke me. I tolerated the speed of *Ultima Underworld* because I was a poor college student and could not do better, but when I saw id's game on my friend's PC, I had to upgrade. I took a big risk and went for a 60MHz Pentium over a 66Mhz 486, even though it was more expensive. I started playing all those games I wasn't able to run well before—*Underworld II*, *System Shock*, *Privateer*, it ran everything just great…

Until *Quake* made it choke. Actually, *Quake* was tolerable—the first expansion pack brought it to its knees. Even that cool new Rendition 3D video card and the custom-made "vQuake" couldn't save it. It was time for a Pentium II. Or, hey wait…for hundreds less I could get one of these K6 processors from AMD! And look at the performance numbers—the salesman showed me a graph where the K6's bar was clearly much longer than the bar for the Pentium II! Too bad it didn't run games worth a damn.

Then there was that Celeron I bought, the 300 "A" version, which was supposed to run with a 66MHz front-side bus but could easily run with the 100MHz front-side bus that Pentium III chips did. I essentially bought a 450MHz chip for the price of a 300. With that kind of speed boost, surely the machine would last four or five years.

Or at least until I bought a 1GHz Athlon two years later. That was the system that would take me to my grave. Every game just flew on it. Nobody will ever need more than a GeForce 3, and there's not a game around that will eat up all my 256MB of RAM.

I just bought an Athlon XP 3000+ and put it in an nForce2 motherboard, complete with a whole gigabyte of low-latency DDR400 RAM. I have a Radeon 9700 Pro, and I even got one of those snazzy new 80GB hard drives with the 8MB of cache, to go along with my twice-as-slow 60GB drive. I am set for *life*!

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Head Shot

Putting one right in the brain

BY TOM CHICK

I'VE JUST BUILT a bunch of tanks. They're making their way across the desert. I'm kind of zoning out, watching them, when I notice it for the first time: the sand is appaloosa with dark shapes moving across the terrain. They're the shadows that would be cast by clouds drifting in front of the sun. This is what the world looks like from this high up. I'm on the next to last mission in the single player campaign and I've never noticed them before. At least, not consciously.

That's not to say I haven't appreciated the graphics in *Command & Conquers Generals*. I have. It looks great. But you mostly notice the stuff that stops at your eyes. When a Technical blows up and the little guy in the back of the truck goes flying through the air, it hits you in the eyes and you immediately notice. But things like cloud shadows go straight to your brain, quietly and effectively tickling awake all those times you peered down from the window of an airplane or looked out at a field from atop a hill.

Cloud shadows aren't unique to *Generals*. But this is an example of those often-unappreciated subtle touches that work at the fringe of awareness, all the more important because they're subtle. Most visuals stop at your eyes. The really effective stuff goes straight to your brain.

> "Your eyes stop on the dinosaur model, but the camera shake tells your brain that it's so big and heavy and terrible that it makes the ground rumble."

The latest *Jurassic Park* game, *Operation Genesis*, makes effective use of a simple trick to get at your brain. When you look at the bigger dinosaurs from up close, there's a camera shake effect. Your eyes stop on the dinosaur model, but the camera shake tells your brain that it's so big and heavy and terrible that it makes the ground rumble. It's as silly a contrivance as lens flare, built on the fallacy that a computer game is viewed through a camera. But you don't think about that because it's a subtle shot right at your brain.

The space combat game *Freelancer* uses the old chestnut of colored lighting for a similar brain shot. The different locations are lit by different suns, each shining its own palette on the same space stations and planets. These simple tonal shifts tell your brain you've just traveled to another star. It's effective because it's subtle and because it doesn't just stop at your eyes like the explosions and laser bolts and trails of fire behind a damaged ship. "This place is a million light years away from that other place where you were five seconds ago," it tells your brain. And your brain goes along with it, letting your eyes do their superficial work of playing the game.

But your brain is awake for botched signals, where a lot of hard work can be undone. *Raven Shield* uses a sophisticated graphics engine to render detailed real-world locations. There are complex new weapon models and character animations. It looks great. The graphics dance in front of your eyes, showing off. But then you shoot someone and the "rag doll" physics take over. Your victim's body slumps and twists into some stupid contortionist pretzel. His legs splay out and bend backwards. He folds in half at the waist. Your brain wakes up and tells your eyes you're just playing a game with poorly coded physics. If *Raven Shield* were the Mona Lisa, the developers would have given her big goofy google eyes.

For Microsoft's next *Flight Simulator* release, they've written a new weather system built around clouds. Their "cloud artists" are working from a physics model in which clouds build out from a central point and that dissipate from the edges inward. There are nine different kinds of clouds. You know, cumulonimbus, cirrus, Doric, and that other one you were supposed to have learned in high-school science. When you're flying through them, you may not notice the different types. But they'll hit your brain, which will remember the last time you looked up at the clouds. At that point, half of Microsoft's work is done. Your brain is telling you you're in the sky.

Graphics engines already look great. Now the important work falls to people like Microsoft's cloud artist, who can get into our brains without hitting us over the head.

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